

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549



FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

Commission file number 1-14287

Centrus Energy Corp.

Delaware

(State of incorporation)

52-2107911

(IRS Employer Identification No.)

**6901 Rockledge Drive, Suite 800, Bethesda, Maryland 20817
(301) 564-3200**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Class A Common Stock, par value \$0.10 per share	LEU	NYSE American

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No o

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Accelerated filer	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No

The aggregate market value of Common Stock held by non-affiliates computed by reference to the price at which the Common Stock was last sold as reported on the New York Stock Exchange as of June 28, 2019, was \$16.8 million. As of March 2, 2020, there were 8,673,976 shares of the registrant's Class A Common Stock, par value \$0.10 per share, and 798,413 shares of the registrant's Class B Common Stock, par value \$0.10 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the 2020 annual meeting of shareholders to be filed with the Securities and Exchange commission within 120 days after the end of fiscal year 2019 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including *Management’s Discussion and Analysis of Financial Condition and Results of Operations* in Part II, Item 7, contains “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934. In this context, forward-looking statements mean statements related to future events, may address our expected future business and financial performance, and often contain words such as “expects”, “anticipates”, “intends”, “plans”, “believes”, “will”, “should”, “could”, “would” or “may” and other words of similar meaning. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For Centrus Energy Corp., particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include: risks related to our significant long-term liabilities, including material unfunded defined benefit pension plan obligations and postretirement health and life benefit obligations; risks relating to our 8.25% notes (the “8.25% Notes”) maturing in February 2027 and our Series B Senior Preferred Stock; risks related to the use of our net operating loss (“NOLs”) carryforwards and net unrealized built-in losses (“NUBILs”) to offset future taxable income and the use of the Rights Agreement (as defined herein) to prevent an “ownership change” as defined in Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”) and our ability to generate taxable income to utilize all or a portion of the NOLs and NUBILs prior to the expiration thereof; risks related to the limited

trading markets in our securities; risks related to our ability to maintain the listing of our Class A Common Stock on the NYSE American LLC (the “NYSE American”); risks related to decisions made by our Class B stockholders and our Series B Senior Preferred stockholders regarding their investment in the Company based upon factors that are unrelated to the Company’s performance; risks related to the Company’s capital concentration; risks related to natural and other disasters, including the continued impact of the March 2011 earthquake and tsunami in Japan on the nuclear industry and on our business, results of operations and prospects; the impact and potential extended duration of the current supply/demand imbalance in the market for low-enriched uranium (“LEU”); our dependence on others for deliveries of LEU including deliveries from the Russian government-owned entity TENEX, Joint-Stock Company (“TENEX”), under a commercial supply agreement with TENEX and deliveries under a long-term supply agreement with Orano Cycle (“Orano”); risks related to existing or new trade barriers and contract terms that limit our ability to deliver LEU to customers; risks related to actions, including government reviews, that may be taken by the United States government, the Russian government or other governments that could affect our ability to perform under our contract obligations or the ability of our sources of supply to perform under their contract obligations to us, including the imposition of sanctions, restrictions or other requirements, including risks relating to the potential expiration of the 1992 Russian Suspension Agreement (“RSA”) and/or a renewal of the RSA on terms not favorable to us; risks related to our ability to sell the LEU we procure pursuant to our purchase obligations under our supply agreements; risks relating to our sales order book, including uncertainty concerning customer actions under current contracts and in future contracting due to market conditions and lack of current production capability; risks related to financial difficulties experienced by customers, including possible bankruptcies, insolvencies or any other inability to pay for our products or services; pricing trends and demand in the uranium and enrichment markets and their impact on our profitability; movement and timing of customer orders; risks related to the value of our intangible assets related to the sales order book and customer relationships; risks associated with our reliance on third-party suppliers to provide essential products and services to us; the impact of government regulation including by the U.S. Department of Energy (“DOE”) and the U.S. Nuclear Regulatory Commission; uncertainty regarding our ability to commercially deploy competitive enrichment technology; risks and uncertainties regarding funding for deployment of the American Centrifuge technology and our ability to perform and absorb costs under our agreement with DOE to demonstrate the capability to produce high assay low enriched uranium (“HALEU”) and our ability to obtain and/or perform under other agreements; risks relating to whether or when government or commercial demand for HALEU will materialize; the potential for further demobilization or termination of our American Centrifuge work; risks related to our ability to perform and receive timely payment under agreements with the DOE, including risk and uncertainties related to the ongoing funding of the government and potential audits; the competitive bidding process associated with obtaining a federal contract; risks related to our ability to perform fixed-price and cost-share contracts, including the risk that costs could be higher than expected; risks that we will be unable to obtain new business opportunities or achieve market acceptance of our products and services or that products or services provided by others will render our products or services obsolete or noncompetitive; risks that we will not be able to timely complete the work that we are obligated to perform; failures or security breaches of our information technology systems; risks related to pandemics and other health crises, such as the global novel coronavirus (COVID-19) outbreak; potential strategic transactions, which could be difficult to implement, disrupt our business or change our business profile significantly; the outcome of legal proceedings and other contingencies (including lawsuits and government investigations or audits); the competitive environment for our products and services; changes in the nuclear energy industry; the impact of financial market conditions on our business, liquidity, prospects, pension assets and insurance facilities; the risks of revenue and operating results fluctuating significantly from quarter to quarter, and in some cases, year to year; and other risks and uncertainties discussed in this and our other filings with the Securities and Exchange Commission.

For a discussion of these risks and uncertainties and other factors that may affect our future results, please see Part I, Item 1A, *Risk Factors*, and the other sections of this Annual Report on Form 10-K. These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. Readers are urged to carefully review and consider the various disclosures made in this report and in our other filings with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this Annual Report on Form 10-K, except as required by law.

PART I

Item 1. *Business*

Overview

Centrus Energy Corp., a Delaware corporation (“Centrus” or the “Company”), is a trusted supplier of nuclear fuel and services for the nuclear power industry. References to “Centrus”, the “Company”, “our”, or “we” include Centrus Energy Corp. and its wholly owned subsidiaries as well as the predecessor to Centrus, unless the context otherwise indicates. We were incorporated in 1998 as part of the privatization of the United States Enrichment Corporation.

Centrus operates two business segments: (a) low-enriched uranium (“LEU”), which supplies various components of nuclear fuel to utilities, and (b) technical solutions, which provides advanced engineering, design, and manufacturing services to government and private sector customers. The technical solutions segment was formerly our contract services segment. The segment was renamed the technical solutions segment on December 31, 2019, to better reflect the nature of work performed and is consistent with our marketing of service offerings as Centrus Technical Solutions. There was no change to the composition of the segment as a result of the re-naming.

Our LEU segment provides most of the Company’s revenue and involves the sale of LEU, its components, and natural uranium to utilities operating commercial nuclear power plants. LEU is a critical component in the production of nuclear fuel for reactors that produce electricity. We supply LEU to both domestic and international utilities for use in nuclear reactors worldwide. We provide LEU from multiple sources including our inventory, medium- and long- term supply contracts and spot purchases. As a long-term supplier of LEU to our customers, our objective is to provide value through the reliability and diversity of our supply sources. Our long-term goal is to resume commercial enrichment production, and we are exploring approaches to that end.

Our technical solutions segment utilizes the unique technical expertise, operational experience and specialized facilities that we developed over nearly two decades as part of our uranium enrichment technology program. We are leveraging these capabilities to expand and diversify our business beyond uranium enrichment, offering new services to existing and new customers in complementary markets.

With the specialized capabilities and workforce at our Technology and Manufacturing Center in Oak Ridge, Tennessee, we are performing technical, engineering and manufacturing services for a range of commercial and government customers and actively working to secure new customers. Our experience developing, licensing, manufacturing and operating advanced nuclear components and systems positions us to provide critical design, engineering, manufacturing and other services to a broad range of potential clients, including those involving sensitive or classified technologies. This work includes design, engineering, manufacturing and licensing services support for advanced reactor and fuel fabrication projects as well as decontamination and decommissioning (“D&D”) work.

With several decades of experience in enrichment, we continue to be a leader in the development of an advanced U.S. uranium enrichment technology, which we believe could play a critical role in supplying fuel for advanced reactors, meeting U.S. national and energy security needs, and achieving our nation’s nonproliferation objectives.

On October 31, 2019, we signed a three-year cost-share contract (the “HALEU Contract”) with DOE to deploy a cascade of centrifuges to demonstrate production of high-assay, low-enriched uranium (“HALEU”) fuel with existing United States origin enrichment technology and provide DOE with HALEU for near term use in its research and development for the advancement of civilian nuclear energy and national security, as well as other programmatic missions. The program has been under way since May 31, 2019, when the Company and DOE signed a preliminary agreement that allowed work to begin while the HALEU Contract was being finalized.

Under the HALEU Contract, DOE agreed to reimburse the Company for 80% of its costs incurred in performing the contract, up to a maximum of \$115 million. The Company's cost share is the corresponding 20% and any costs incurred above these amounts. Costs under the HALEU Contract include *program costs*, including direct labor and materials and associated indirect costs that are classified as *Cost of Sales*, and an allocation of corporate costs supporting the program that are classified as *Selling, General and Administrative Expenses*. Services to be provided over the three-year contract include constructing and assembling centrifuge machines and related infrastructure in a cascade formation. When estimates of remaining program costs to be incurred for such an integrated, construction-type contract exceed estimates of total revenue to be earned, a provision for the remaining loss on the contract is recorded to *Cost of Sales* in the period the loss is determined. Our corporate costs supporting the program are recognized as expense as incurred over the duration of the contract term. As of December 31, 2019, the portion of our anticipated cost share under the HALEU Contract representing our share of remaining projected program costs was recognized in *Cost of Sales* as an accrued loss of \$18.3 million. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections.

HALEU is a component of an advanced nuclear reactor fuel that is not commercially available today and may be required for a number of advanced reactor designs currently under development in both the commercial and government sectors. Existing reactors typically operate on LEU with the uranium-235 isotope concentration below 5%. HALEU has a uranium-235 concentration ranging from 5% to 20%, giving it several potential technical and economic advantages. For example, the higher concentration of uranium-235 means that fuel assemblies and reactors can be smaller and reactors will require less frequent refueling. Reactors can also achieve higher "burnup" rates, meaning a smaller volume of fuel will be required overall and less waste will be produced. HALEU may also be used in the future to fabricate next-generation fuel forms for the existing fleet of reactors in the United States and around the world. These new HALEU-based fuels could improve the economics of nuclear reactors and inherent safety features while increasing the amount of electricity that can be generated at existing reactors. HALEU fuel may also ultimately be used in new commercial and government applications in the future, such as reactors for the military.

We believe our investment in the HALEU technology will position the Company to meet the needs of our customers in the future as they deploy advanced reactors and next generation fuels. By investing in HALEU technology now, and as the only domestically-owned company with HALEU enrichment capability, we believe the Company could be well positioned to capitalize on a potential new market as the demand for HALEU based fuels increases with the development of advanced reactors. There are no guarantees about whether or when government or commercial demand for HALEU will materialize, and there are a number of technical, regulatory and economic hurdles that must be overcome for these fuels and reactors to come to the market.

In 2019, our management team led the Company's successful efforts to add new sales and customers to the LEU order book, reduce costs, expand into new areas of the nuclear fuel cycle, and maintain our position as a trusted partner to the global nuclear industry and return value to our shareholders. Our competitive strengths include:

- **Developing fuel for the next generation of reactors:** In 2019, we finalized an agreement to deploy a cascade of centrifuges to demonstrate production of HALEU with existing United States origin enrichment technology and provide DOE with HALEU for near term use in its research and development for the advancement of civilian nuclear energy and security, and other programmatic missions. The program leverages our domestic enrichment and advanced manufacturing experience to demonstrate uranium enrichment at levels not commercially available today that may be required for a number of advanced reactor designs currently under development in both the commercial and government sectors.
- **Enrichment technology development:** We continued to advance our centrifuge technology in specialized facilities in Oak Ridge, Tennessee to support potential future government and/or commercial use and ensure that it remains ready to be deployed.

- **Positioned for the long term:** We have long-term nuclear fuel sales and supply contracts in place that extend to 2030; these contracts will provide a stream of revenue for many years and provide a foundation for growth. Because we do not have the large capital and overhead costs of a commercial production facility, we are positioned to continue to obtain supply of LEU from an oversupplied market experiencing prices near their historic lows, which we believe will strengthen our position for the future.
- **Diverse supply portfolio:** In 2019, we continued our efforts to diversify and expand our sources of supply and improve our logistics for delivery of enriched uranium. For example, we acquired access to additional enriched uranium supply from the excess inventories of utility operators of nuclear power plants and from other primary and secondary sources of enriched uranium supply. Our strategy is to remain a highly diversified and reliable supplier of LEU with the flexibility to meet the evolving needs of our customers and effectively compete in the marketplace.

We believe that our position as a leading provider of enriched uranium and our long-standing global relationships will enable us to increase our future market share in the nuclear fuel market and support our growth into complementary areas of the nuclear and other industries. We are well-positioned to capitalize on our heritage, industry-wide relationships, and diversity of supply to provide reliable and competitive sources of nuclear fuel and related services. Centrus continues to be valued by our customers as a source of diversity, stability, and competition in the enrichment market.

Nevertheless, both the LEU and the technical solutions segments of our business face considerable challenges. The nuclear industry in general, and the nuclear fuel industry in particular, is in a period of significant change, which continues to affect the competitive landscape. In the years following the 2011 Fukushima accident, the published market prices for uranium enrichment declined more than 75%. While the monthly price indicators gradually started to increase beginning in late 2018, the uranium enrichment segment of the nuclear fuel market remains oversupplied and faces uncertainty about future demand for nuclear power generation. For further details, refer to Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations - Market Conditions and Outlook*.

Changes in the competitive landscape affect pricing trends, change customer spending patterns, and create uncertainty. To address these changes, we have taken steps to adjust our cost structure and may seek further adjustments to our cost structure and operations and to evaluate opportunities to grow our business organically or through acquisitions and other strategic transactions.

We are also actively considering, and expect to consider from time to time in the future, potential strategic transactions, which could involve, without limitation, acquisitions and/or dispositions of businesses or assets, joint ventures or investments in businesses, products or technologies or changes to our capital structure. In connection with any such transaction, we may seek additional debt or equity financing, contribute or dispose of assets, assume additional indebtedness, or partner with other parties to consummate a transaction.

For a discussion of the potential risks and uncertainties facing our business, see Part I, Item 1A, *Risk Factors*.

Low Enriched Uranium

LEU consists of two components: separative work units (“SWU”) and uranium. Revenue from our LEU segment is derived primarily from:

- sales of the SWU component of LEU,
- sales of both the SWU and uranium components of LEU, and
- sales of natural uranium.

Revenue for our LEU segment accounted for approximately 81% of our total revenue in 2019. Our customers are primarily domestic and international utilities that operate nuclear power plants. Our agreements with electric utilities are primarily long-term, fixed-commitment contracts under which our customers are obligated to purchase a specified quantity of the SWU component of LEU from us. Our agreements for natural uranium and enriched uranium product sales, where we sell both the SWU and uranium component of LEU, are generally shorter-term, fixed-commitment contracts.

Uranium and Enrichment

Uranium is a naturally occurring element and is mined from deposits located in Kazakhstan, Canada, Australia, and several other countries including the United States. According to the World Nuclear Association, there are adequate measured resources of uranium to fuel nuclear power at current usage rates for about 90 years. In its natural state, uranium is principally comprised of two isotopes: uranium-235 (“U²³⁵”) and uranium-238 (“U²³⁸”). The concentration of U²³⁵ in natural uranium is only 0.711% by weight. Most commercial nuclear power reactors require LEU fuel with a U²³⁵ concentration greater than natural uranium and up to 5% by weight. Future reactor designs currently under development will likely require higher U²³⁵ concentration levels of up to 20%. Uranium enrichment is the process by which the concentration of U²³⁵ is increased.

SWU is a standard unit of measurement that represents the effort required to transform a given amount of natural uranium into two components: enriched uranium having a higher percentage of U²³⁵ and depleted uranium having a lower percentage of U²³⁵. The SWU contained in LEU is calculated using an industry standard formula based on the physics of enrichment. The amount of enrichment deemed to be contained in LEU under this formula is commonly referred to as its SWU component and the quantity of natural uranium deemed to be contained in LEU under this formula is referred to as its uranium or “feed” component.

While in some cases customers purchase both the SWU and uranium components of LEU from us, utility customers typically provide uranium to us as part of their enrichment contracts, and in exchange we deliver LEU to these customers and charge for the SWU component. Title to uranium provided by customers generally remains with the customer until delivery of LEU, at which time title to LEU is transferred to the customer, and we take title to the uranium.

The following outlines the steps for converting natural uranium into LEU fuel, commonly known as the nuclear fuel cycle:

Mining and Milling. Natural, or unenriched, uranium is removed from the earth in the form of ore and then crushed and concentrated.

Conversion. Uranium concentrates (“U₃O₈”) are combined with fluorine gas to produce uranium hexafluoride (“UF₆”), a solid at room temperature and a gas when heated. UF₆ is shipped to an enrichment plant.

Enrichment. UF₆ is enriched in a process that increases the concentration of the U²³⁵ isotope in the UF₆ from its natural state of 0.711% up to 5%, or LEU, which is usable as a fuel for current light water commercial nuclear power reactors. Future commercial reactor designs may use uranium enriched up to 20% U²³⁵, or HALEU.

Fuel Fabrication. LEU is then converted to uranium oxide and formed into small ceramic pellets by fabricators. The pellets are loaded into metal tubes that form fuel assemblies, which are shipped to nuclear power plants. As the advanced reactor market develops, HALEU may be converted to uranium oxide, metal, chloride or fluoride salts, or other forms and loaded into a variety of fuel assembly types optimized for the specific reactor design.

Nuclear Power Plant. The fuel assemblies are loaded into nuclear reactors to create energy from a controlled chain reaction. Nuclear power plants generate approximately 20% of U.S. electricity and 11% of the world's electricity.

Used Fuel Storage. After the nuclear fuel has been in a reactor for several years, its efficiency is reduced and the assembly is removed from the reactor's core. The used fuel is warm and radioactive and is kept in a deep pool of water for several years. Many utilities have elected to then move the used fuel into steel or concrete and steel casks for interim storage.

LEU Segment Order Book

Our order book of sales under contract in the LEU segment ("order book") extends to 2030. As of December 31, 2019, our order book was \$1.0 billion. The order book is the estimated aggregate dollar amount of revenue for future SWU and uranium deliveries, and includes \$0.3 billion of deferred revenue and advances from customers as of December 31, 2019, whereby customers have made advance payments to be applied against future deliveries. We anticipate our SWU and uranium revenue from sales currently under contract in our order book will be in a range of \$110 million to \$120 million during 2020. As of December 31, 2018, our order book was \$1.0 billion. In 2019, new contracts signed offset the impact of completed deliveries.

Most of our contracts provide for fixed purchases of SWU during a given year. Our estimate of the order book is partially based on customers' estimates of the timing and size of their fuel requirements and other assumptions that are subject to change. For example, depending on the terms of specific contracts, the customer may be able to increase or decrease the quantity delivered within an agreed range. Our order book estimate is also based on our estimates of selling prices, which may be subject to change. For example, depending on the terms of specific contracts, prices may be adjusted based on escalation using a general inflation index, published SWU price indicators prevailing at the time of delivery, and other factors, all of which are variable. We use external composite forecasts of future market prices and inflation rates in our pricing estimates. Refer to Part I, Item 1A, *Risk Factors*, for a discussion of risks related to our order book.

Suppliers

We have a diverse base of supply that includes:

- existing inventory of LEU,
- mid- and long-term contracts with enrichment producers,
- purchases and loans from secondary sources including fabricators and utility operators of nuclear power plants that have excess inventory, and
- spot purchases of SWU and uranium.

We have and will seek to continue to further diversify this base of supply and take advantage of the opportunities to obtain additional short and long-term supplies of LEU.

Currently, our largest suppliers of SWU are the Russian government entity TENEX, Joint-Stock Company ("TENEX") and the French government owned company Orano Cycle ("Orano").

Under an agreement with TENEX (the “Russian Supply Agreement”), we purchase SWU contained in LEU received from TENEX, and we deliver natural uranium to TENEX for the LEU’s uranium component. The Russian Supply Agreement was originally signed with commitments through 2022 but was modified in 2015 to give us the right to reschedule certain quantities of SWU of the original commitments into the period 2023 and beyond, in return for the purchase of additional SWU in those years. We have exercised our right to reschedule deliveries through 2028 when the Russian Supply Agreement is scheduled to terminate.

Under the Russian Supply Agreement, we pay for the SWU contained in the LEU delivered to us, and either supply natural uranium to TENEX for the uranium content of the LEU or, in limited cases, pay for such content. SWU pricing is determined by a formula that uses a combination of market-related price points and other factors. The LEU that we obtain from TENEX under the Russian Supply Agreement is currently subject to quotas and other restrictions under an agreement between the United States and the Russian Federation governing exports of Russian uranium products to the United States. This agreement is scheduled to expire as of December 31, 2020, but the U.S. Department of Commerce (“DOC”) has proposed to extend the agreement on terms that may not expressly protect our ability to import LEU into the United States after 2020 under the Russian Supply Agreement. Further, although we expect an extension of this agreement would include quotas for imports of Russian uranium products after 2020, the Russian Supply Agreement does not require TENEX to provide us the right to use any or all of the post-2020 quotas potentially resulting from any agreement between the United States and the Russian Federation. If the Russian Supply Agreement is not protected from new quotas, we will have limited opportunities to sell the SWU in the LEU that we are obligated to order from TENEX under the Russian Supply Agreement. We may request that TENEX make quota available to us, sell the SWU in foreign markets or secure a deferral or cancellation of our purchase obligations under the Russian Supply Agreement; however, the likelihood of any or all of these alternatives is not known. In past circumstances involving similar negotiations between the United States and the Russian Federation, we have successfully agreed with TENEX to either secure additional quota or defer our contractual obligations to TENEX, but TENEX’s willingness to enter into such agreements in the future, or the cost to us of securing their consent to such agreements, is not known. Moreover, unless the DOC agrees in its proposed extension of the trade agreement to increase the quotas available to cover imports into the United States of LEU under all of TENEX’s contracts for sales to its U.S. customers and all of its sales to us under the Russian Supply Agreement, TENEX may not have sufficient quota available to allocate to all of its contract parties, including Centrus, to meet their needs.

TENEX may ultimately elect not to accept the terms offered by the DOC for an extension of the trade agreement. Depending upon the outcome of a pending administrative review of the existing agreement between the United States and the Russian Federation, the DOC may elect to terminate the agreement and restart a pending anti-dumping investigation of Russian imports of uranium products that was suspended in 1992, when the agreement between the United States and the Russian Federation was first signed. If the anti-dumping investigation is restarted, importers of Russian LEU, including the Company, could be required, pending the final outcome of the investigation, to deposit funds with the U.S. government to cover potential duties equal to over 115% of the value of the LEU that would be owed if the investigation results in a final antidumping order. The requirement to deposit those funds to cover potential duties would significantly increase our cost of importing Russian LEU during the pending investigation and, if the investigation results in an antidumping order that imposes duties, on a going-forward basis, to such an extent that we could not afford to import the LEU that we are obligated to order from TENEX, potentially threatening our key source of supply. Refer below to *-Competition and Foreign Trade - Limitations on Imports of LEU from Russia*.

Given these consequences, we are actively seeking to ensure that any extension of the trade agreement with Russia protects the Russian Supply Agreement and does not terminate the suspension of the antidumping investigation on terms that would require the deposit of funds to cover potential duties.

Subject to securing new customer contracts in challenging overseas markets, including markets protected by formal and informal trade barriers, we expect that a portion of the Russian LEU that we order during the term of the Russian Supply Agreement will need to be delivered to customers who will use it in foreign reactors. The Russian LEU that we deliver to foreign customers can be delivered either at fabrication facilities in the United States or in

foreign countries. The amount of SWU we must purchase from TENEX under the Russian Supply Agreement exceeds our current sales order book and, therefore, we will need to make new sales to place all the Russian LEU we must order to meet our SWU purchase obligations to TENEX. In addition, due to quotas and other limitations, not all of our delivery obligations under our existing contracts can be met with Russian LEU.

We also have an agreement (the “Orano Supply Agreement”) with Orano for the long-term supply of SWU contained in LEU, nominally commencing in 2023. Under the Orano Supply Agreement, we will purchase SWU contained in LEU received from Orano, and then deliver natural uranium to Orano for the natural uranium feed material component of LEU. We have the option to extend the six-year purchase period for an additional two years. The Orano Supply Agreement provides significant flexibility to adjust purchase volumes, subject to annual minimums and maximums in fixed amounts that vary year by year. The pricing for the SWU purchased by us is determined by a formula that uses a combination of market-related price points and other factors, and is subject to certain floors and ceilings. Prices are payable in a combination of U.S. dollars and euros.

We procure LEU from other sources under short-term and long-term contracts and have inventories available that diversify our supply portfolio and provide flexibility to meet the needs of our customers.

Market prices for SWU fell substantially in the aftermath of the nuclear incident at Fukushima, Japan in 2011. Recent purchases of SWU and our long-term contract with Orano reflect this decline in market prices. We signed our large, long-term supply agreement with TENEX in 2011. Prices under the Russian Supply Agreement also have been adjusted to reflect lower market prices based on a one-time market related price reset that was agreed when we signed the contract in 2011. The reset occurred in 2018, reducing the unit cost per SWU for purchases we made in 2019 and will make for the duration of the contract.

Technical Solutions

Our technical solutions segment reflects our technical, manufacturing, engineering and operations services offered to public and private sector customers, including the American Centrifuge engineering and testing activities we have performed as a contractor for UT-Battelle LLC (“UT-Battelle”), the contractor operating the Oak Ridge National Laboratory, and the engineering, procurement, construction, manufacturing and operations services being performed under the HALEU Contract. With our private sector customers, we seek to leverage our domestic enrichment experience, engineering know-how, and precision manufacturing facility to assist customers with a range of engineering, design, and advanced manufacturing projects including the production of fuel for next-generation nuclear reactors and the development of related facilities.

We have a long record as a global leader in advanced technology, manufacturing and engineering. Our manufacturing, engineering and testing facilities and our highly-trained workforce are deeply engaged in developing advanced nuclear fuel solutions, providing engineering and precision manufacturing services, and advancing the next generation of uranium enrichment technology.

We are exploring a number of options for returning to domestic production in the future. The economics for commercial deployment of new enrichment capacity are severely challenged by the current supply/demand imbalance in the market for LEU and related downward pressure on market prices for SWU, which reached a historic low in 2018 and have since gradually started to increase, as described above.

Government Contracting

On October 31, 2019, we signed the three-year cost-share HALEU Contract with DOE to deploy a cascade of centrifuges to demonstrate production of HALEU for advanced reactors. The program has been under way since May 31, 2019, when the Company and DOE signed an interim HALEU letter agreement that allowed work to begin while the full contract was being finalized.

Under the HALEU Contract, DOE agreed to reimburse the Company for 80% of its costs incurred in performing the contract, up to a maximum of \$115 million. The Company's cost share is the corresponding 20% and any costs incurred above these amounts. As described in *Overview* above, the portion of our anticipated cost share under the HALEU Contract representing our share of remaining projected program costs was recognized in *Cost of Sales* as an accrued loss of \$18.3 million as of December 31, 2019. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections. The HALEU Contract is incrementally funded and DOE is currently obligated for costs up to approximately \$53.2 million of the \$115 million. The Company received cash payments of \$10.7 million through December 31, 2019.

Over the past five years, our government contracts with UT-Battelle have provided for engineering and testing work on the American Centrifuge technology at our facilities in Oak Ridge, Tennessee. Our completed fixed-price contract with UT-Battelle for the period from October 1, 2017, through September 30, 2018, generated revenue of approximately \$16.0 million upon completion of defined milestones. Although the contract expired September 30, 2018, we continued to perform work on a limited basis towards the expected milestones as the parties worked toward a successor agreement. A successor fixed-price agreement was entered into with UT-Battelle in September 2019 and was completed in 2019 resulting in revenue of \$1.2 million. In February 2020, an additional \$4.4 million fixed-price agreement was entered into with UT-Battelle with a milestone deliverable in the second quarter of 2020.

We continue to invest in advanced technology because of the potential for future growth into new areas of business for the Company, while also preserving our unique workforce at our Technology and Manufacturing Center in Oak Ridge, Tennessee.

On September 27, 2018, we leveraged our D&D experience and entered into an agreement with DOE to decontaminate and decommission the K-1600 facility located at the East Tennessee Technology Park in Oak Ridge, Tennessee. Under the terms of the agreement, pursuant to a work authorization under our lease with DOE, we were required to remove and dispose of government owned materials and equipment in order to render the facility radiologically uncontaminated and unclassified. The contract was a cost-plus fixed fee contract totaling approximately \$15 million. The Company announced that it had successfully completed decontamination and decommissioning of the facility on October 9, 2019. In connection with the substantial completion of the work, we terminated our lease with DOE for the K-1600 facility on September 30, 2019.

In addition, we have entered into other contracts with DOE, other agencies and their contractors to provide engineering, design and manufacturing services.

Commercial Contracting

In March 2018, we entered into a services agreement with X Energy, LLC ("X-energy") to provide X-energy with (i) technical and resource support for criticality safety evaluation of processing equipment, design of fresh fuel transport packages, and conceptual mock-up of a nuclear fuel production facility and (ii) non-cash in-kind contributions subject to a cooperative agreement between X-energy and the United States government. The services were performed pursuant to separate task orders issued under the agreement. The initial task orders ran through December 31, 2018, and provided for time-and-materials based pricing with payments to be made to us totaling approximately \$4.4 million. In addition, we contributed non-cash in-kind contributions with a value of approximately \$2.5 million. In January 2020, we extended the period of performance through June 30, 2020 which resulted in revised total payments to be made to us of approximately \$4.6 million and non-cash in-kind contributions to be provided by us with a value of approximately \$2.6 million.

In November 2018, we entered into a second services agreement with X-energy to provide X-energy with (i) technical and resource support to the design and license application development of its nuclear fuel production facility and (ii) non-cash in-kind contributions subject to a cooperative agreement between X-energy and the United States government. The services will be performed pursuant to separate task orders issued under the agreement. The initial task orders ran through September 30, 2019 with deliverables to be completed through November 30, 2019, and provided for time-and-materials based pricing with payments to be made to us totaling approximately \$4.2 million. In addition, we agreed to provide non-cash in-kind contributions with a value of approximately \$2.4 million. In January 2020, we extended the second service agreement period of performance to June 30, 2020 with the addition of additional tasks orders which resulted in revised total payments to be made to us of approximately \$7.3 million and non-cash in-kind contributions to be provided by us of approximately \$3.9 million.

In addition, we have entered into other contracts for the engineering, design, and advanced manufacturing services with other commercial entities.

Competition and Foreign Trade

It is estimated that the enrichment industry market is currently about 50 million SWU per year. Our global market share is less than 5%. Global LEU suppliers in our highly competitive industry compete on the basis of price and reliability of supply. The four largest LEU suppliers comprise over 95% of market share combined:

- Rosatom, a Russian government entity, which sells LEU through its wholly owned subsidiary TENEX;
- Urenco, a consortium of companies owned or controlled by the British and Dutch governments and two German utilities;
- Orano, a company largely owned by the French government that was formerly part of the French government owned company, AREVA; and
- To a lesser extent, China Nuclear Energy Industry Corporation (“CNEIC”), a company owned by the Chinese government.

The production capacity for Rosatom/TENEX is estimated by the World Nuclear Association to be approximately 27 million SWU per year. Imports of LEU and other uranium products produced in the Russian Federation are subject to restrictions as described below under — *Limitations on Imports of LEU from Russia*.

Urenco reported installed capacity at its European and U.S. enrichment facilities of 18.6 million SWU per year at the end of 2018.

Orano’s gas centrifuge enrichment plant in France began commercial operations in 2011 and the plant’s nominal capacity of 7.5 million SWU was reportedly in service at the end of 2016. Orano has reported that it has suspended planned capacity expansions beyond 7.5 million SWU.

CNEIC has emerged as a significant producer primarily focused on supplying domestic requirements in China. CNEIC’s commercial SWU production capacity is estimated to be approximately 6.8 million SWU per year in 2020.

All of our current competitors are owned or controlled, in whole or in part, by foreign governments. These competitors may make business decisions in both domestic and international markets that are influenced by political or economic policy considerations rather than exclusively by commercial considerations.

There are also producers of LEU in Japan and Brazil that primarily serve a portion of their respective domestic markets.

LEU may also be produced by down-blending government stockpiles of highly-enriched uranium. Governments control the timing and availability of highly-enriched uranium released for this purpose, and the release of this material to the market could impact market conditions. Given the current oversupplied nuclear fuel market, any additional LEU from down-blended highly-enriched uranium released into the market would have a negative effect on prices for LEU.

LEU we supply to foreign customers is exported under the terms of international agreements governing nuclear cooperation between the United States and the country of destination or other entities, such as the European Union or the International Atomic Energy Agency. The LEU supplied to us is subject to the terms of cooperation agreements between the country in which the material is produced and the country of destination or other entities.

Russian Suspension Agreement

Imports into the United States of LEU and other uranium products produced in the Russian Federation, including LEU imported by Centrus under the Russian Supply Agreement, are subject, through December 31, 2020, to quotas imposed under legislation enacted into law in September 2008 and under the 1992 Russian Suspension Agreement (“RSA”), as amended in 2008. These quotas limit the amount of Russian LEU that can be imported into the United States for U.S. consumption.

The U.S. Department of Commerce (“DOC”) is currently conducting an administrative review of the current status of, and compliance with, the RSA during the period October 2017 through September 2018 (the “Second Administrative Review”) and in December 2019, initiated another review of the period October 2018 through September 2019 (the “Third Administrative Review”). In an earlier review (the “First Administrative Review”), which covered the period October 2016 through September 2017 and was completed in December 2017, the DOC found that TENEX, Centrus and others had complied with the terms of the RSA during the period of review, but deferred until the Second Administrative Review any decision on whether the RSA continues to meet the statutory requirements that the RSA (i) prevent the suppression or undercutting of price levels of domestic uranium products and (ii) continue to be in the public interest. In a preliminary determination in the Second Administrative Review, issued in December 2019, the DOC again found that Centrus and others had complied with the RSA, but again deferred making a determination on the statutory requirements, which it said would be addressed in a post-preliminary analysis, which has yet to be issued. A final determination in the Second Administrative Review is expected to be issued in June 2020.

If, in the final determination of the Second Administrative Review, the DOC finds evidence either of non-compliance with the RSA, or that the statutory requirements are no longer being met, it could terminate the RSA, reinstate the antidumping investigation that the RSA suspended, and begin collecting duties in excess of 115% ad valorem on imports of Russian uranium products, including the LEU that the Company imports under the Russian Supply Agreement.

In February 2019, the DOC formally opened negotiations with the Russian Federation State Atomic Energy Corporation (Rosatom) with respect to a possible extension of the term of the RSA. In connection with these negotiations, the DOC is seeking a significant extension of the RSA. We are working with industry stakeholders and others to ensure that the extension will include sufficient quota to allow all existing contracts with TENEX, including the Russian Supply Agreement, to be fully implemented, but it is possible that the terms of the extension will not expressly protect our ability to import LEU under the Russian Supply Agreement or require that available quota be allocated to those imports.

An extension of the RSA would continue the existing suspension of the antidumping investigation and therefore not require payment of the duties described above, as long as the suspension remained in place. Centrus does not currently have in place any agreement with TENEX to share quotas that may apply after 2020, when the existing quotas terminate. Unless the RSA extension provides for sufficient quota or other relief that would allow Centrus to deliver in the United States all the Russian LEU we procure under the Russian Supply Agreement, (i) our ability to meet our commitments under our order book and to obtain new sales commitments would be substantially

jeopardized, and (ii) our ability to earn revenues with the Russian LEU we are required to procure under the Russian Supply Agreement would be substantially reduced. As a result, we would lose both revenue and market share to our competitors.

Similarly, if, instead of an extension of the RSA, the DOC reached an adverse final determination in the Second Administrative Review and elected to restart the antidumping investigation of Russian uranium products, including LEU, we would be obligated to deposit funds with the DOC to cover potential duties and potentially pay antidumping duties on a going-forward basis (if the antidumping investigation resulted in an antidumping order) that would render the LEU containing the SWU that we purchase under the Russian Supply Agreement too expensive to place into the market. Such an outcome would cause us to incur significant losses in fulfilling our existing contracts, and make it commercially challenging to win new contracts using the Russian LEU.

Limitations on Imports of LEU from France

The DOC imposed an antidumping order on imports of French LEU in 2002, subject to periodic review by the DOC to determine if the order should be maintained in effect. In connection with its most recent view of the order, the DOC did not receive any notices that domestic parties intended to participate in the review. Consequently, the order was revoked in the March 2019. Since the revocation of the Order, material imported from France, including material imported by Centrus under its Orano contract, is no longer subject to tariffs.

Other Trade Actions

In July 2019, in response to a finding of the Secretary of Commerce that uranium was being imported in such quantities and under such circumstances that it threatened to impair the national security of the United States, the President directed that a high-level U.S. government nuclear fuel working group be formed to develop recommendations for reviving and expanding domestic nuclear fuel production.

In 2018, in connection with withdrawal by the United States from a 2015 multilateral agreement known as the “Joint Comprehensive Plan of Action,” or JCPOA, the U.S. government re-imposed sanctions on Iran’s Atomic Energy Organization of Iran (AEOI) and a number of its subsidiaries. Waivers were granted to allow non-Iranian entities to continue to work on certain programs that, among other things, allowed affiliates of Rosatom to continue work at the Fordow enrichment plant in Iran. On October 29, 2019, the U.S. government extended four of these waivers for 90 days, but in November 2019, the U.S. State Department announced that one of the four waivers that permitted Rosatom’s affiliates to continue work at the Fordow enrichment plant would terminate early, on December 15, 2019, in response to an announcement by Iran that it would enrich uranium at that facility. (The remaining three waivers were extended for an additional sixty days on January 31, 2020.) Termination of the waiver of sanctions that might have applied to Russian work at Fordow could have allowed the U.S. government to impose sanctions on Rosatom or its affiliates for conducting work at Fordow. In early December 2019, however, a Rosatom subsidiary announced that it was suspending work at the Fordow plant, thereby reducing the risk that Rosatom or its subsidiaries, including TENEX, would be sanctioned. To date, no sanctions have been imposed or announced on TENEX or its affiliate that produces LEU that would adversely affect our ability to implement the Russian Supply Agreement.

If TENEX or its affiliate that produces LEU for delivery under the Russian Supply Agreement were sanctioned and if the sanctions ultimately preclude the Company from purchasing LEU from TENEX, the Company would seek a license, waiver or other approval from the U.S. government to ensure that the Company could continue to fulfill its purchase and sales obligations. There is no assurance that such a license, waiver or approval would be granted. If a license, waiver or approval were not granted, the Company would need to look to alternative sources of LEU to replace the LEU that it could not procure from TENEX, and to the extent these sources were insufficient or more expensive, it would adversely impact our business, results of operations, and competitive position.

DOE Facilities

We produced LEU through 2001 at the former Portsmouth Gaseous Diffusion Plant (“Portsmouth GDP”) in Piketon, Ohio and through 2013 at the former Paducah Gaseous Diffusion Plant (“Paducah GDP”) in Paducah, Kentucky which we had leased from DOE. We currently store our existing inventory at third party offsite licensed locations under agreements with the operators of those facilities. Our prior enrichment operations generated hazardous, low-level radioactive and mixed wastes. The storage, treatment, and disposal of wastes are regulated by federal and state laws. The treatment and disposal of wastes from our prior operations at the Paducah GDP were completed in 2016. Regarding our past operations at the former Portsmouth GDP, DOE agreed in 2011 to accept ownership of all nuclear material at the site, some of which required processing for waste disposal. We agreed to pay DOE for costs for disposing of our share of such wastes. The treatment and disposal of wastes from our prior operations at the Portsmouth GDP were completed in 2017.

The Portsmouth and Paducah gaseous diffusion plants were operated by agencies of the U.S. government for more than 40 years prior to the creation of the Company through privatization of the Government enterprise in 1998. As a result of such operation, there are contamination and other potential environmental liabilities associated with the Government’s prior operation of the plants. The USEC Privatization Act and our former leases for the plants provide that DOE remains responsible for the D&D of the gaseous diffusion plants. Further, DOE continued operations and cleanup activities both during and subsequent to our operations at the plants.

We lease facilities and related personal property in Piketon, Ohio from DOE. In connection with the HALEU letter agreement, DOE and Centrus amended the lease agreement, which was scheduled to expire by its terms on June 30, 2019. The lease was renewed and extended until May 31, 2022. Any facilities or equipment constructed or installed under contract with DOE will be owned by DOE and may be returned to DOE in an “as is” condition at the end of the lease term. DOE will be responsible for the D&D of any returned facilities or equipment. If we determine the equipment and facilities may benefit Centrus after completion of the HALEU program, we can extend the facility lease and ownership of the equipment will be transferred to us, subject to mutual agreement regarding D&D and other issues.

On September 27, 2018, we entered into an agreement with DOE to D&D the K-1600 facility of DOE located at the East Tennessee Technology Park. Under the terms of the agreement, pursuant to a work authorization under our lease with DOE, we were required to remove and dispose of government owned materials and equipment in order to render the facility non-contaminated and unclassified. On October 9, 2019, we announced the successful completion of the D&D of the facility. In connection with the substantial completion of the work, we terminated our lease with DOE for the K-1600 facility on September 30, 2019.

Employees

A summary of our employees by location follows:

Location	No. of Employees at December 31,	
	2019	2018
Oak Ridge, TN	104	105
Piketon, OH	69	65
Bethesda, MD	53	51
Other	4	5
Total Employees	230	226

On January 16, 2020, members of the United Steelworkers (“USW”) Local 689-5 ratified a new collective bargaining agreement for the employees represented by the USW at the advanced technology facility in Piketon, Ohio. The contract term is through October 1, 2022.

Executive Officers

Executive officers are elected by and serve at the discretion of the Board of Directors. Executive officers at March 26, 2020, follow:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Daniel B. Poneman	64	President and Chief Executive Officer
Larry B. Cutlip	60	Senior Vice President, Field Operations
Elmer W. Dyke	56	Senior Vice President, Business Operations and Chief Commercial Officer
Dennis J. Scott	60	Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary
Philip O. Strawbridge	65	Senior Vice President, Chief Financial Officer, Chief Administrative Officer and Treasurer
John M.A. Donelson	55	Senior Vice President, Sales and Chief Marketing Officer

Daniel B. Poneman has been President and Chief Executive Officer since April 2015 and was Chief Strategic Officer in March 2015. Prior to joining the Company, Mr. Poneman was Deputy Secretary of Energy from May 2009 to October 2014, in which capacity he also served as Chief Operating Officer of the U.S. Department of Energy.

Larry B. Cutlip has been Senior Vice President, Field Operations since January 2018, was Vice President, Field Operations from May 2016 through December 2017, was Deputy Director of the American Centrifuge Project from January 2015 to May 2016, was Director, Centrifuge Manufacturing from April 2008 to December 2014, was Director, Program Management and Strategic Planning from December 2005 to April 2008, was Manager, Engineering from May 1999 to December 2005, and held positions in operations management and engineering at the Company and its predecessors since 1981.

Elmer W. Dyke has been Senior Vice President, Business Operations and Chief Commercial Officer since January 2018 and was Senior Vice President, Business Operations from September 2015 through December 2017. Prior to joining the Company, Mr. Dyke was a Senior Vice President of NAC International's global consulting business and Vice President of International Sales from August 2010 to September 2015.

Dennis J. Scott has been Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary since January 2018 and was Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary from May 2016 through December 2017. Mr. Scott was Deputy General Counsel and Director, Corporate Compliance from April 2011 to May 2016, Acting Deputy General Counsel from August 2010 to April 2011, Assistant General Counsel and Director, Corporate Compliance from April 2005 to August 2010 and Assistant General Counsel from January 1994 to April 2005.

Philip O. Strawbridge has been Senior Vice President, Chief Financial Officer, Chief Administrative Officer and Treasurer since September 2019. Prior to joining the Company, Mr. Strawbridge served as an executive adviser at Court Square Capital from 2010 to 2013. Mr. Strawbridge served in various executive positions including Chief Financial Officer at EnergySolutions, a nuclear services and technology company, from 2006 to 2010. He was Chief Executive Officer and Chief Operating Officer of BNG America, which provided nuclear waste management services and technology to U.S. Government and commercial clients, from 1999 until BNG America was acquired by EnergySolutions in early 2006.

John M.A. Donelson has been Senior Vice President, Sales and Chief Marketing Officer since October 2019 and was Vice President, Sales and Chief Marketing Officer from January 2018 through October 2019. Mr. Donelson was Vice President, Marketing, Sales and Power from April 2011 through December 2017, Vice President, Marketing and Sales from December 2005 to April 2011, Director, North American and European Sales from June 2004 to December 2005, Director, North American Sales from August 2000 to June 2004 and Senior Sales Executive from July 1999 to August 2000.

Available Information

Our website is www.centrusenergy.com. We make available on our website, or upon request, without charge, access to our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed with, or furnished to, the Securities and Exchange Commission, pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission.

Our code of business conduct provides a brief summary of the standards of conduct that are at the foundation of our business operations. The code of business conduct states that we conduct our business in strict compliance with all applicable laws. Each employee must read the code of business conduct and sign a form stating that he or she has read, understands and agrees to comply with the code of business conduct. A copy of the code of business conduct is available on our website or upon request without charge. We will disclose on the website any amendments to, or waivers from, the code of business conduct that are required to be publicly disclosed.

We also make available on our website or upon request, free of charge, our code of business conduct, Board of Directors Governance Guidelines, and our Board committee charters.

Item 1A. Risk Factors

The following discussion sets forth the material risk factors that could affect our financial condition and operations. Readers should not consider any descriptions of such factors to be a complete set of all potential risks that could affect us. Below, we describe certain important operational, financial, strategic and legal and compliance risks.

Operational Risks

Operational risks relate to risks arising from systems, processes, people and external events that affect the operation of our business, including supply chain and business disruption and data protection and security, including cyber security.

Restrictions on imports or sales of LEU or SWU that we buy could adversely affect profitability and the viability of our business.

Our ability to place LEU we purchase into existing and future contracts with customers is subject to U.S. import limitations and, in some cases, the terms of contracts with customers that preclude us from delivering SWU or LEU produced in specific countries. Further, in the case of Russian LEU, sales of Russian LEU or SWU are more challenging than sales of non-Russian material because some of our customers are unable or unwilling to accept Russian LEU.

Imports of LEU under the Russian Supply Agreement are subject to quotas imposed under legislation enacted into law in September 2008 and under the 1992 Russian Suspension Agreement, as amended in 2008 (the “RSA”). We are dependent upon TENEX to grant us the right to use a portion of these quotas under the terms of the Russian Supply Agreement in order to import Russian LEU for sale in the United States. The RSA is scheduled to expire at the end of 2020, and the Russian Supply Agreement does not include any provisions addressing what would happen if additional or other restrictions on imports of Russian LEU or SWU are imposed after 2020.

The RSA is subject to periodic review by the Department of Commerce (“DOC”). The DOC is currently conducting a review that is scheduled to be completed in June 2020. As result of the review, the DOC may find that the RSA has not been complied with or does not meet certain statutory requirements, which, in either case, could cause the DOC to terminate the RSA. If the RSA is terminated, duties or other restrictions could be applied to imports of LEU or other uranium products. These duties, at least initially, would exceed 115% of the value of the imported LEU.

Since 2019, the DOC, Rosatom and TENEX have been engaged in negotiations to extend the RSA. In connection with these negotiations, the DOC is seeking a significant extension of the RSA. We are working with industry stakeholders and others to ensure that the extension will include sufficient quota to allow all existing contracts with TENEX, including the Russian Supply Agreement, to be fully implemented, but it is possible that the terms of the extension will not expressly protect our ability to import LEU under the Russian Supply Agreement or require that available quota be allocated to those imports. Because the Russian Supply Agreement does not stipulate what would happen if quotas or other restrictions are imposed post-2020, there is no assurance that the Company will be permitted to use any future quotas to import LEU under the Russian Supply Agreement post-2020. Further, even if TENEX were willing to grant the Company the right to use all or a portion of the new quotas, there is no assurance that the new quotas would be sufficient to cover all the LEU that the Company is required to order under the Russian Supply Agreement after 2020. Finally, while the Company has asked that the DOC to provide sufficient quota for the Russian Supply Agreement, the DOC has yet to adopt that position. Further, even if sufficient quota is granted to TENEX for the Russian Supply Agreement, TENEX may elect not to use that quota for the Russian Supply Agreement.

It also is possible that, in lieu of agreeing to extend the RSA, the DOC or the Russian Federation may elect to allow the RSA to expire and for the antidumping investigation that was suspended by the RSA to restart. Under such circumstances, any imports of Russian LEU, including by the Company, would be required to be accompanied by a deposit of funds to cover potential duties owed to the U.S. government of over 115% of the value of the imported LEU, pending the outcome of the investigation. If the investigation resulted in an antidumping order imposing duties, the deposits would be kept by the U.S. government, up to the amount of duties owed for imports entering the United States during the restarted investigation, and duties would have to be paid to the U.S. government, on a going-forward basis, on all imports entering the United States after the order is imposed.

In addition to the potential for quotas, duty deposits or duties that might apply as results of an extended or terminated RSA, other duties, sanctions and other trade restrictions could be applied to LEU and other forms of foreign uranium as a result of trade actions by the United States. For example, sanctions on Rosatom, TENEX or other Rosatom subsidiaries and affiliates could be imposed through legislation or as a result of sanctions imposed by the U.S. government, and these sanctions would prevent or limit the ability of the Company to do business with these companies.

Regardless of the reason for which they are imposed, quotas, duties, sanctions or other trade restrictions would affect Centrus' sales of non-U.S. natural uranium, SWU or LEU containing non-U.S. uranium or SWU, which would adversely affect Centrus' revenues and financial results.

If we cannot purchase the LEU, SWU or uranium that we are committed to purchase from our foreign suppliers, including TENEX, or we cannot sell such LEU, SWU or uranium for consumption in the United States due to quotas, duties, sanctions or other trade restrictions, we will have to sell the LEU, SWU or uranium for consumption outside the United States. Our ability to sell outside the United States may be limited by policies of foreign governments or regional institutions that seek to restrict the origin of LEU, SWU or uranium purchased by utilities and other entities under their jurisdiction. In addition, foreign companies who take delivery of imported LEU, SWU or uranium from us in the United States may be unwilling to cooperate with us in meeting requirements under U.S. law that provide that the imported material be re-exported within a fixed period of time. Further, geopolitical events, including domestic or international reactions or responses to such events, as well as concerns about U.S. national security or other issues, could lead to U.S. or foreign government or international actions, including the imposition of sanctions, that could disrupt our ability to purchase, sell or make deliveries to customers of LEU or other uranium products from Russia or other countries, or even to continue to do business with one or more of our suppliers. Any of these quotas, duties, sanctions, or other trade restrictions could threaten our ability to fulfill our purchase commitments to our suppliers and our delivery commitments to customers, with adverse effects on our reputation, costs, results of operations, cash flows and long-term viability. Even in the absence of quotas, duties, sanctions, or other trade restrictions, customers may be unwilling to agree to purchase or amend contracts to permit delivery of foreign LEU, SWU or uranium. Accordingly, there is no assurance that we will be successful in our efforts to sell or deliver, in or outside of the United States, the LEU, SWU or uranium we are obligated to purchase under the Russian Supply Agreement, the Orano Supply Agreement and other supply agreements. Inability to purchase, sell or deliver LEU, SWU or uranium for any reason, could adversely impact our business, profitability and long-term viability.

We may be unable to sell all of the LEU we are required to purchase under supply agreements for prices that cover our costs, which could adversely affect profitability and the viability of our business.

We may not achieve the anticipated benefits from supply agreements we enter into. For example, the price we are charged for the SWU component under some of our supply agreements is determined by a formula that uses a combination of market-related price points and other factors at the time of delivery, which may result in prices that are not aligned with the prevailing market prices at the time we enter into contracts with customers. Other existing or new supply agreements may have pricing mechanisms that may not be aligned with market prices. The pricing mechanisms of our supply agreements may not align with pricing provided in our new or existing sales contracts and could result in sales prices that do not cover our purchase costs and may limit our ability to make new sales at prices that exceed the purchase price we pay for the LEU.

We are dependent on existing inventory and other sources to meet our obligations to customers.

We are currently dependent on existing inventory, purchases from TENEX, Orano and other sources to meet our obligations to customers. We are acquiring alternative sources of supply in the market. The availability, cost and terms of additional alternative sources of supply are subject to variables that are difficult to predict. A significant delay in, or stoppage or termination of, deliveries of material to us under our supply agreements could adversely affect our ability to make deliveries to customers and would adversely affect revenues and results of operations. A delay, stoppage or termination could occur due to a number of factors, including logistical problems with shipments, commercial or political disputes between the parties or their governments, imposition of quotas, duties, sanctions, or other restrictions or a failure or inability by either party to meet the terms of such agreements. An interruption of deliveries could adversely impact our business, results of operations, and prospects.

We face risks associated with reliance on third-party suppliers to meet customer commitments.

We rely on third-party suppliers to provide essential services to the Company, such as the storage and management of inventory, transportation and radiation protection. We face the risk that those service providers may not perform on time, with the desired quality or at all for a variety of reasons, many of which are outside our control. Alternative third-party suppliers may not be readily available or may be more costly. As a result of such risks, we may be unable to meet our customer commitments, our costs could be higher than planned, and/or our relationship with customers could be negatively affected, all of which could adversely affect our business, results of operations, and prospects. Customers place great value in the reliability of their supply of fuel for their reactors. Failure to make a delivery could have an adverse effect on our ability to make new sales and could have an adverse effect on our business, results of operations, and prospects.

Periodically, events or issues arise that may affect the performance of our suppliers. There can be no assurance that the steps we may take to address these events or issues will be successful in minimizing potential impacts to the Company and our customers. Unless adequately addressed, such events or issues could adversely affect our business, results of operations, and prospects.

Dependence on our largest customers could adversely affect us.

In 2019, our ten largest nuclear fuel customers represented approximately 72% of total revenue and our three largest customers represented approximately 56% of total revenue. Further, individual orders average roughly \$10 million. A reduction in purchases from our customers, whether due to their decision not to purchase optional quantities or for other reasons, including a disruption or change in their operations or financial condition that reduces purchases of LEU from us, could adversely affect our business, results of operations, and prospects.

We have seen increased price competition when competitors and secondary suppliers lowered their prices to sell excess supply created by prevailing market conditions. This has adversely affected our sales efforts. Because price is a significant factor in a customer's choice of a LEU supplier, when contracts come up for renewal, customers may reduce their purchases from us if we are not able to compete on price or for other reasons, resulting in the loss of new sales contracts. Once lost, customers may be difficult to regain because they typically purchase LEU under long-term contracts. Therefore, given the need to maintain existing customer relationships, our ability to raise prices to respond to increases in costs or other developments may be limited. In addition, because we have a commitment to acquire LEU from third parties, any reduction in purchases by the customers below the level required for us to resell the material we are obligated to buy could adversely affect our business, results of operations, and prospects.

The dollar amount of the sales order book, as stated at any given time, is not necessarily indicative of future sales revenues and is subject to uncertainty.

Our order book of sales is the estimated aggregate dollar amount of SWU and uranium sales that we expect to recognize as revenue in future periods under existing contracts with customers. There is no assurance that the revenues projected will be realized, or, if realized, will result in profits. Most of our contracts provide for fixed purchases of SWU during a given year. Our estimate of the order book is partially based on customers' estimates of the timing and size of their fuel requirements and other assumptions that may prove to be inaccurate. The order book is also based on estimates of selling prices, which are subject to change. For example, depending on the terms of specific contracts, prices may be adjusted based on escalation using a general inflation index, published SWU or uranium market price indicators prevailing at the time of delivery, and other factors, all of which are unpredictable, particularly in light of general uncertainty in the nuclear market. We use external composite forecasts of future market prices and inflation rates in our pricing estimates. These forecasts may not be accurate, and therefore estimates of future prices could be over or understated. Any inaccuracy in estimates of future prices would add to the imprecision of the order book estimate.

For a variety of reasons, the amounts of SWU and uranium that we will sell in the future under existing contracts, and the timing of customer purchases under those contracts, may differ from estimates. Customers may not purchase as much as we predict, nor at the times we anticipate, as a result of operational or financial difficulties, changes in fuel requirements, reactor shutdowns, natural or other disasters, changes in law or other reasons. Reduced purchases would reduce the revenues we actually receive from contracts included in the order book. Customers could also seek to modify or cancel orders in response to concerns regarding our financial strength or future business prospects. Further, financial and operational issues, including possibility for bankruptcies, facing our customers could affect the order book.

The order book includes a number of contracts with sales prices that are significantly above current market prices. Customers may seek to limit their obligations under these existing contracts or may be unwilling to continue those contracts. Further, some of our customers are facing financial difficulties and may seek modifications to their contracts or seek bankruptcy protection.

From time to time, we have worked with customers to modify contracts that have delivery, scheduling, origin or other terms that may require modifications to address our anticipated supply sources. If we were to initiate such discussions in the future, we have no assurance that our customers would agree to revise existing contracts or would not require concessions, which could adversely affect the value of our order book and our prospects.

Our technical solutions segment conducts business under various types of contracts, including fixed-price and cost-share contracts, which subjects us to risks associated with cost over-runs.

The technical solutions segment conducts business under various types of contracts, including fixed-price contracts and cost-share contracts, where costs must be estimated in advance of our performance. These types of contracts are priced, in part, on cost and scheduling estimates that are based on assumptions including prices and availability of experienced labor, equipment and materials. If, for example, these estimates prove inaccurate, if there are errors or ambiguities as to contract specifications or if circumstances change due to, among other things, unanticipated technical problems, poor project execution, changes in the costs of equipment and materials or our suppliers' or subcontractors' inability to perform, then cost overruns may occur. We may not be able to obtain compensation for additional work performed or expenses incurred. For example, the Company entered in a cost share agreement with the U.S. Department of Energy ("DOE") for the licensing, construction, assembly and operation of our AC100M centrifuge machines and related infrastructure in a cascade formation to produce high assay low enriched uranium ("HALEU"). Under the Agreement, DOE will reimburse us for up to 80% of the total program costs up to a maximum amount of \$115 million. Any costs incurred above these amounts would increase the Company's cost share. Our failure to accurately estimate the resources and time required for fixed-price or cost-share contracts or our failure to complete our contractual obligations within the time frame and costs committed could result in reduced profits, greater costs or a loss for that contract. If the cost overrun on a contract is

significant, or we encounter issues that affect multiple contracts, the cost overrun could have a material adverse effect on our business, financial condition and results of operations.

Our ability to expand our technical solutions segment is dependent on developing new business opportunities, meeting the requirements of new customers and timely performance of work in different market sectors.

Our technical solutions segment is focusing on new customers and new industries with which we do not currently do business as part of our business development efforts. As we develop these opportunities, we may face greater costs and we may need to devote more resources to obtain contract work. There can be no assurance that we will successfully identify new business opportunities, accurately estimate the time, cost and complexity of the work, achieve market acceptance of our services or that services provided by others will not render our services obsolete or noncompetitive or we will be able to timely complete the work or avoid cost overruns.

The U.S. government awards contracts through a rigorous competitive process and our efforts to obtain future federal contracts may not be successful.

The U.S. government conducts a rigorous competitive bidding and award process for most federal contracts. We face strong competition and pricing pressures for any additional contract awards from the U.S. government, and we may be required to qualify or continue to qualify under the various multiple award task order contract criteria. It may be difficult for us to win future awards from the U.S. government and we may have other contractors sharing in any U.S. government awards that we win. In addition, negative publicity regarding findings stemming from audits, congressional opposition, and litigation may adversely affect our ability to obtain future awards.

Our U.S. government contract work is regularly reviewed and audited by the U.S. government and these reviews can lead to withholding or delay of payments to us, non-receipt of award fees, legal actions, fines, penalties and liabilities and other remedies against us.

U.S. government contracts are subject to specific regulations such as the Federal Acquisition Regulation (“FAR”), the Truth in Negotiations Act, Cost Accounting Standards rules and regulations (“CAS”), the Service Contract Act and DOE regulations. Failure to comply with any of these regulations, requirements or statutes may result in contract price adjustments, financial penalties or contract termination. Our U.S. government contracts are subject to audits, cost reviews and investigations by U.S. government contracting oversight agencies such as the Defense Contract Audit Agency (“DCAA”). The DCAA reviews the adequacy of, and our compliance with, our internal control systems and policies, including our labor, billing, accounting, purchasing, property, estimating, compensation and management information systems. The DCAA has the authority to conduct audits and reviews to determine if we are complying with the requirements under the FAR and CAS, pertaining to the allocation, period assignment and allowability of costs assigned to U.S. government contracts. The DCAA presents its report findings to the contracting agency. Should the contracting agency determine that we have not complied with the terms of our contract and applicable statutes and regulations, payments to us may be disallowed, which could result in adjustments to previously reported revenues and refunding of previously collected cash proceeds. Additionally, we may be subject to litigation brought by private individuals on behalf of the U.S. government under the Federal False Claims Act, which could include claims for treble damages. If we experience performance issues under any of our U.S. government contracts, the U.S. government retains the right to pursue remedies, which could include termination under any affected contract. If any contract were so terminated, our ability to secure future contracts could be adversely affected and may also have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our U.S. government contracts and subcontracts are dependent on continued U.S. government funding and government appropriations, which may not be made on a timely basis or at all, and could have an adverse effect on our business.

Current and future U.S. government contracts and subcontracts are dependent on government funding, which is generally subject to Congressional appropriations. Our ability to perform under these federal contracts and subcontracts is dependent upon sufficient funding for, and timely payment by, the entities with which we have contracted. There could be reductions or terminations of, or delays in, the required funding. If the contracting governmental agency, or the prime contractor, does not receive sufficient appropriations to cover its contractual obligations, it may terminate our contract or delay or reduce payment to us. Any inability to award a contract or subcontract, delay in payment, or the termination of a contract due to a lapse in funding, could adversely affect our business, financial condition or results of operations or cash flow.

Failures to protect classified or other sensitive information or security breaches of information technology (“IT”) systems could result in significant liability or otherwise have an adverse effect on our business.

Our business requires us to use and protect classified, sensitive and other protected information as well as business proprietary information and intellectual property. Our computer networks and other information technology (“IT”) systems are designed to protect this information through the use of classified networks and other procedures. We routinely experience various cybersecurity threats, threats to our information technology infrastructure, unauthorized attempts to gain access to our Company sensitive information, and denial-of-service attacks as do our customers, suppliers, subcontractors and other business partners. The threats we face vary from attacks common to most industries to more advanced and persistent, highly organized adversaries, including nation states, which target us and other government contractors because we protect national security information. If we are unable to protect sensitive information, our customers or governmental authorities could question the adequacy of our threat mitigation and detection processes and procedures, and depending on the severity of the incident, our Company data, customers’ data, our employees’ data, our intellectual property, and other third party data could be compromised. As a consequence of the persistence, sophistication and volume of these attacks, we may not be successful in defending against all such attacks. Due to the evolving nature of these security threats and the national security aspects of much of the data we protect, the impact of any future incident cannot be predicted.

We have a number of suppliers and indirect suppliers with a wide variety of systems and cybersecurity capabilities and we may not be successful in preventing adversaries from exploiting possible weak links in our supply chain. We also must rely on this supply chain for detecting and reporting cyber incidents, which could affect our ability to report or respond to cybersecurity incidents in a timely manner. The costs related to cyber or other security threats or disruptions may not be fully insured or indemnified by other means.

A material network breach in the security of the IT systems of the Company or third parties for any reasons, including, but not limited to, human error, could include the theft of our business proprietary and intellectual property. To the extent any security breach or human error results in a loss or damage to data, or in inappropriate disclosure of classified or other protected information, the breach could cause grave damage to the country’s national security and to our business. Threats to our IT systems are constantly evolving and there is no assurance that our efforts to maintain and improve our IT systems will be sufficient to meet current or future threats. One of the biggest threats to the information we protect comes from the insider threat — an employee with legitimate access who engages in misconduct and/or negligence. Transitions in the business, in particular the potential for employee layoffs and other transitions, can increase the risk that an insider with access could steal Company intellectual property. Any event leading to a security breach or loss of, or damage to, data, whether by our employees or third parties, could result in negative publicity, significant remediation costs, legal liability, and damage to our reputation and could have a material adverse effect on our business, financial condition, results of operations and cash flows. In an extreme case, DOE could terminate our permit to access classified information resulting in elimination of our ability to continue American Centrifuge work.

Financial Risks

Financial risks relate to our financial condition, capital structure and ability to meet financial obligations and the price, volatility and ownership concentration of our Class A Common Stock.

We have significant long-term liabilities.

We continue to have significant long-term liabilities, including the indebtedness under our 8.25% Notes, which mature in February 2027. We also still have substantial pension and postretirement health and life benefit obligations and other long-term liabilities. In addition, the terms of the indenture governing our 8.25% Notes will not restrict Centrus or any of its subsidiaries from incurring substantial additional indebtedness in the future.

Our significant long-term liabilities (and other third-party financial obligations) could have important consequences, including:

- the terms and conditions imposed by the documents governing our indebtedness could make it more difficult for us to satisfy our obligations to lenders and other creditors, resulting in possible defaults on and acceleration of such indebtedness or breaches of such other commitments;
- we may be more vulnerable to adverse economic conditions and have less flexibility to plan for, or react to, changes in the nuclear industry, which could place us at a competitive disadvantage compared to industry competitors that have less debt or comparable debt at more favorable interest rates and that, as a result, may be better positioned to withstand economic downturns;
- we may find it more difficult to obtain additional financing for future working capital, and other general corporate requirements;
- we will be required to dedicate a substantial portion of our cash resources to payments on the 8.25% Notes, due in February 2027, thereby reducing the availability of our cash to fund our operations, capital expenditures and future business opportunities; and,
- the indenture governing our 8.25% Notes, subject to certain exceptions, places certain restrictions on the ability of our subsidiary, United States Enrichment Corporation (“Enrichment Corp.”), to transfer cash and other assets to us, which could constrain our ability to pay dividends on our Common Stock or to fund our commitments or the commitments of our other subsidiaries.

If we incur substantial additional indebtedness, the foregoing risks would intensify. Additional information concerning the 8.25% Notes including the terms and conditions of the 8.25% Notes are described in *Note 9, Debt* of the consolidated financial statements.

The Company has material unfunded defined benefit pension plans obligations and postretirement health and life benefit obligations. These liabilities are anticipated to require material contributions in future periods, which may divert funds from other uses and could adversely impact the Company’s liquidity and prospects.

Centrus and its subsidiary, Enrichment Corp., maintain qualified defined benefit pension plans that are guaranteed by the Pension Benefit Guaranty Corporation (“PBGC”), a wholly owned U.S. government corporation that was created by the Employee Retirement Income Security Act of 1974, as amended (“ERISA”). Centrus also maintains non-qualified defined benefit pension plans for certain executive officers. Effective August 2013, accrued benefits under the defined benefit pension plans are fixed and no longer increase to reflect changes in compensation or Company service. In addition, Enrichment Corp. maintains postretirement health and life benefit plans. The aforementioned pension and health and life benefit plans are closed to new participants. These plans are anticipated to require material cash contributions in the future, which may divert funds from other uses and could adversely impact our liquidity depending on the timing of any required contributions or payments in relation to our sources of cash and other payment obligations. See also the Risk Factor, *Levels of returns on pension and postretirement*

benefit plan assets, changes in interest rates and other factors affecting the amounts to be contributed to fund future pension and postretirement benefit liabilities could adversely affect earnings and cash flows in future periods, below.

Levels of returns on pension and postretirement benefit plan assets, changes in interest rates and other factors affecting the amounts to be contributed to fund future pension and postretirement benefit liabilities could adversely affect earnings and cash flows in future periods.

Earnings may be positively or negatively impacted by the amount of expense we record for employee benefit plans. This is particularly true with expense for the pension and postretirement benefit plans. Generally accepted accounting principles in the United States (“U.S. GAAP”) require a company to calculate expense for these plans using actuarial valuations. These valuations are based on assumptions relating to financial markets and other economic conditions. Changes in key economic indicators can result in changes in the assumptions used. The key year-end assumptions used to estimate pension and postretirement benefit expenses for the following year are the discount rate, the expected rate of return on plan assets and healthcare cost trend rates. The rate of return on pension assets and changes in interest rates affect funding requirements for defined benefit pension plans. The IRS and the Pension Protection Act of 2006 regulate the minimum amount we contribute to our pension plans. The amount required to contribute to pension plans can have an adverse effect on our cash flows.

Our revenues and operating results may fluctuate significantly from quarter to quarter and year to year, which could have an adverse effect on our cash flows.

Revenue is recognized when or as we transfer control of the promised LEU or uranium to the customer. Customer demand is affected by, among other things, electricity markets, reactor operations, maintenance and the timing of refueling outages. Customer payments for the SWU component of LEU typically average roughly \$10 million per order. Further, some customers are facing challenging market and financial conditions, including seeking protection under bankruptcy laws. Accordingly, they may seek modification of or relief from their obligations either informally or under bankruptcy laws. As a result, a relatively small change in the timing, amount or other terms of customer orders for LEU due to a change in a customer’s refueling schedule or other reasons may cause operating results to be substantially above or below expectations, which could have an adverse effect on our cash flows.

Results of operations could be negatively impacted if adverse conditions or changes in circumstances indicate a possible impairment loss related to our intangible assets.

Intangible assets originated from our reorganization and application of fresh start accounting as of September 30, 2014. The intangible assets represented the fair value adjustment to the assets and liabilities for our LEU segment. The intangible assets remaining on our balance sheet relate to our sales order book and customer relationships. The order book intangible asset is amortized to expense as the order book valued at emergence is reduced, principally as a result of deliveries to customers. The customer relationships intangible asset is amortized to expense using the straight-line method over the estimated average useful life of 15 years.

The carrying values of the intangible assets are subject to impairment tests whenever adverse conditions or changes in circumstances indicate a possible impairment loss. If impairment is indicated, the asset carrying value will be reduced to its fair value. Inherent in our fair value determinations are certain judgments and estimates, including projections of future cash flows, the discount rate reflecting the risk inherent in future cash flows, the interpretation of current economic indicators and market valuations, and strategic plans with regard to operations. A change in these underlying assumptions would cause a change in the results of the tests, which could cause the fair value of the intangible asset to be less than its respective carrying amount.

Centrus is dependent on intercompany support from Enrichment Corp.

Substantially all of our revenue-generating operations are conducted at our subsidiary, Enrichment Corp. The financing obtained from Enrichment Corp. funds our general corporate expenses, including interest payments on the 8.25% Notes, which are guaranteed on a limited and subordinated basis by Enrichment Corp. As a wholly owned subsidiary of Centrus, Enrichment Corp. has its own set of creditors and a separate board of directors (the “Enrichment Board”), who are elected by Centrus. Current and future funding and support are conditional and dependent on Enrichment Corp.’s own financial condition and a determination by the Enrichment Board that such funding is in the interest of Enrichment Corp.

There is a limited trading market for our securities and the market price of our securities is subject to volatility.

The price of our Class A Common Stock remains subject to volatility. The market price and level of trading of our Class A Common Stock could be subject to wide fluctuations in response to numerous factors, many of which are beyond our control. These factors include, among other things, our limited trading history, our limited trading volume, the concentration of holdings of our Class A Common Stock, actual or anticipated variations in our operating results and cash flow, the nature and content of our earnings releases, announcements or events that impact our products, customers, competitors or markets, business conditions in our markets and the general state of the securities markets and the market for energy-related stocks, as well as general economic and market conditions and other factors that may affect our future results.

One of our Class B stockholders has sold shares of Class B Common Stock to a third-party, which resulted in the automatic conversion of the sold shares into Class A Common Stock. Our Class B stockholders may make decisions regarding their investment in the Company based upon factors that are unrelated to the Company’s performance. Any further sales by such stockholder or a decision by the other Class B stockholder to sell shares would also result in automatic conversion (with limited exceptions) of Class B Common Stock into Class A Common Stock upon the sale of Class B Common Stock, which in turn could significantly adversely impact the trading price of the Class A Common Stock.

Our 8.25% Notes and the Series B Preferred Stock are not listed on any securities exchange. No assurance can be given as to the liquidity of the trading market for 8.25% Notes or the Series B Preferred Stock. The 8.25% Notes and the Series B Preferred Stock may be traded only infrequently in transactions arranged through brokers or otherwise, and reliable market quotations for the 8.25% Notes and the Series B Preferred Stock may not be available. In addition, the trading prices of the 8.25% Notes and the Series B Preferred Stock will depend on many factors, including prevailing interest rates, the limited trading volumes, and the other factors discussed above with respect to the Class A Common Stock.

A small number of Class A stockholders may exert significant influence over the direction of the Company.

As of December 31, 2019, based solely on amounts reported in Schedule 13D and 13G filings with the SEC, two principal stockholders (those stockholders with beneficial ownership of more than 10% of our Class A Common Stock) collectively beneficially own approximately 30% of our Class A Common Stock. As a result, these stockholders may be able to exert significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as a merger of the Company or sale of substantially all of the Company’s assets. These stockholders may have interests that differ from, and may vote in a way adverse to, other holders of Class A Common Stock or adverse to the recommendations of the Company’s management. This concentration of ownership may make it more difficult for other stockholders to effect substantial changes in the Company, may limit the ability of the Company to pass certain initiatives or other items that require stockholder approval, and may also have the effect of delaying, preventing or expediting, as the case may be, a change in control of the Company.

A small number of Class A stockholders who also have significant holdings of the Company's Series B Preferred Stock and 8.25% Notes may be motivated by interests that are not aligned with the Company's other Class A stockholders.

Currently, a small number of persons collectively own greater than 50% of our Series B Preferred Stock and 25% of our 8.25% Notes. As a result, these stockholders may have interests that differ from the remainder of the Class A stockholders, and, as a result, may vote or take other actions in a way adverse to other holders of Class A Common Stock.

Our outstanding Series B Preferred Shares rank senior to Common Stock with respect to amounts payable in the event of our liquidation, dissolution or winding-up and we may not pay dividends on our Common Stock while Series B Preferred Shares remain outstanding.

As of December 31, 2019, we had outstanding Series B Preferred Shares with an aggregate liquidation preference of \$127.2 million, including accrued but unpaid dividends of \$22.3 million. Accrued preferred dividends must be paid upon certain conditions such as the achievement of certain financial thresholds, which could limit our flexibility to use cash for other purposes if those thresholds are met. In the event of our liquidation, dissolution or winding-up and there are amounts available for distribution to equity holders after satisfaction of our existing indebtedness and other liabilities, we would be required to make distributions in the amount of the aggregate liquidation preference, including accrued but unpaid dividends at that time, to the holders of the Series B Preferred Shares prior to making any distributions to holders of our Common Stock, which may mean there are insufficient amounts remaining to make a distribution to holders of our Common Stock. The terms of our Series B Preferred Shares also provide that we may not pay dividends on our Common Stock (other than dividends payable in Common Stock) so long as any shares of our Series B Preferred Stock are outstanding. In addition, our Series B Preferred Shares accrue preferred dividends at a rate of 7.5% per annum of the liquidation amount at origination, or \$104.6 million, and we do not anticipate paying dividends for the foreseeable future. As a result, the amount of dividends and distributions in a liquidation event, which are senior to the Common Stock, will continue to increase and could adversely affect the value of our Common Stock as long as the Series B Preferred Shares remain outstanding. Redemption of our Series B Preferred Shares pursuant to their terms would require us to pay the aggregate liquidation preference including all accrued but unpaid dividends. If we were to otherwise seek to repurchase or retire the Series B Preferred Shares, we may not be able to do so on favorable terms or at all and we could be required to use existing cash, issue additional debt, preferred shares and/or another class of common stock, which may also be senior to our Class A and Class B Common Stock, place additional restrictions on our use of cash or our operations or otherwise dilute the interests of the holders of our Common Stock.

Our ability to utilize our net operating loss carryforwards to offset future taxable income may be limited.

Our ability to fully utilize our existing net operating losses ("NOLs") or net unrealized built-in losses could be limited or eliminated in the event (i) we undergo an "ownership change" as described under Section 382 of the Code, (ii) we do not reach profitability or are only marginally profitable, or (iii) there are changes in U.S. government laws and regulations. An "ownership change" is generally defined as a greater than 50% change in equity ownership by value over a rolling three-year period. Past or future ownership changes, some of which may be beyond our control, as well as differences and fluctuations in the value of our equity securities may adversely affect our ability to utilize our NOLs and could reduce our flexibility to raise capital in future equity financings or other transactions, or we may determine to pursue transactions even if they would result in an ownership change and impair our ability to use our NOLs. In addition, the Section 382 Rights Agreement we have adopted with respect to our common stock and the transfer restrictions in the Series B Preferred Stock contain limitations on transferability intended to prevent the possibility of experiencing an "ownership change," but we cannot assure you that these measures will be effective or we may determine to pursue transactions even if they would result in an ownership change and impair our ability to use our NOLs. In addition, any changes to tax rules and regulations or the interpretation of tax rules and regulations (including recent tax legislation) could negatively impact our ability to recognize any potential benefits from our NOLs or net unrealized built-in losses.

Strategic Risks

Strategic risks relate to the Company's future business plans and strategies, including the risks associated with: the global macro environment in which we operate, the demand for our products and services, competitive threats and technology innovation.

Our future prospects are tied directly to the nuclear energy industry worldwide, and the financial difficulties experienced by, and operating conditions of our customers could adversely affect our results of operations and financial condition.

Potential events that could affect either nuclear reactors under current or future contracts with us or the nuclear industry as a whole, include:

- natural or other disasters (such as the 2011 Fukushima disaster) impacting nuclear facilities or involving shipments of nuclear materials;
- regulatory actions or changes in regulations by nuclear regulatory bodies applicable to us, our suppliers or our customers;
- decisions by agencies, courts or other bodies under applicable trade and other laws applicable to us, our suppliers or our customers;
- disruptions in other areas of the nuclear fuel cycle, such as uranium supplies or conversion;
- civic opposition to, or changes in government policies regarding, nuclear operations;
- business decisions concerning reactors or reactor operations;
- the financial condition of reactor owners and operations;
- the need for generating capacity; or
- consolidation within the electric power industry.

These events could adversely affect us to the extent they result in a reduction or elimination of customers' contractual requirements to purchase from us, the suspension or reduction of nuclear reactor operations, the reduction of supplies of raw materials, lower demand, burdensome regulation, disruptions of shipments or production, increased competition from third parties, increased costs or difficulties or increased liability for actual or threatened property damage or personal injury.

Additionally, customers may face financial difficulties, including from factors unrelated to the nuclear industry, that could affect their willingness or ability to make purchases. We are exposed to the risk of loss in the event of nonperformance or a default by customers on their contracts. We cannot provide any assurance that our customers will not default on their obligations to us or file for bankruptcy protection. If a customer files for bankruptcy protection, we likely would be unable to collect all, or even a significant portion, of amounts that are owed to us. A customer default and bankruptcy filing could have a material adverse effect on our business, financial position, results of operations or cash flows.

The continued excess supply of LEU in the market could adversely affect market prices and our business results.

Approximately 60 reactors in Japan and Germany were taken offline following the March 2011 earthquake and tsunami that caused irreparable damage to four reactors in Fukushima, Japan. Since that time, many reactors worldwide have closed, or are scheduled to close, years ahead of the end of their projected operating lifespan. Events related to Fukushima created an over-supply of nuclear fuel that continues to heavily influence market prices. In addition, U.S. reactor operators face aggressive price competition from natural gas and subsidized renewable generation like wind and solar. As a result, since 2013, United States utilities have closed or have announced plans to close 19 reactors with additional reactors at risk for early closure. In 2018, market prices for uranium enrichment hit an all-time low, but as of December 31, 2019, have recovered by 38%. Market uncertainty, including the possibility of additional future quotas, duties, sanctions or other trade restrictions on imported Russian

LEU or Russian suppliers of LEU, and reduced demand has adversely affected our ability to sell LEU. See also the Risk Factor, *Restrictions on imports or sales of LEU or SWU that we buy could adversely affect profitability and the viability of our business* above.

We have long been a leading supplier of LEU to Japanese and U.S. utilities. To maintain our order book with Japanese and U.S. utilities with reduced demand for fuel, we have restructured some contracts to give customers greater flexibility to meet their obligations without a material loss in value to Centrus. If deliveries under contracts included in our order book are significantly delayed, modified or canceled because customers enter bankruptcy or seek to limit their obligations, our revenues and cash flows may be adversely impacted, with a corresponding impact on our financial condition. In addition, China has emerged as a significant enriched uranium producer. Although primarily focused on supplying domestic requirements in China, Chinese government-owned enrichment plants also supply LEU to international markets, which may further contribute to the excess supply of LEU.

The ability to attract and retain key personnel is critical to the success of our business.

The success of our business depends on key executives, managers, scientists, engineers and other skilled personnel. The ability to attract and retain these key personnel may be difficult in light of the uncertainties currently facing the business and changes we may make to the organizational structure to adjust to changing circumstances. Changes in senior management could create uncertainty among our employees, customers and other third parties with which we do business. The inability to retain appropriately qualified and experienced senior executives could negatively affect our operations, strategic planning and performance.

The potential for DOE to seek to terminate or exercise its remedies under the 2002 DOE-USEC Agreement and our other agreements with DOE, or to require modifications to such agreements that are adverse to our interests, may have adverse consequences on the Company.

The Company and DOE signed an agreement dated June 17, 2002, as amended (the “2002 DOE-USEC Agreement”), pursuant to which the parties made long-term commitments directed at resolving issues related to the stability and security of the domestic uranium enrichment industry. The 2002 DOE-USEC Agreement requires the Company to develop, demonstrate and deploy advanced enrichment technology in accordance with milestones and provides for remedies in the event of a failure to meet a milestone under certain circumstances.

DOE has specific remedies under the 2002 DOE-USEC Agreement if we fail to meet a milestone that would adversely impact our ability to begin commercial operations of the American Centrifuge Plant on schedule, and such delay was within our control or was due to our fault or negligence or if we abandon or constructively abandon the commercial deployment of an advanced enrichment technology. These remedies include terminating the 2002 DOE-USEC Agreement, revoking our access to DOE’s centrifuge technology that is required for the success of the American Centrifuge project, requiring us to transfer certain rights in the American Centrifuge technology and facilities to DOE, and requiring us to reimburse DOE for certain costs associated with the American Centrifuge project.

We also granted to DOE an irrevocable, non-exclusive right to use or permit third parties on behalf of DOE to use all centrifuge technology intellectual property (“Centrifuge IP”) royalty free for U.S. government purposes (which includes national defense purposes, including providing nuclear material to operate commercial nuclear power reactors for tritium production). We also granted an irrevocable, non-exclusive license to DOE to use such Centrifuge IP developed at our expense for commercial purposes (including a right to sublicense), which may be exercised only if we miss any of the milestones under the 2002 DOE-USEC Agreement or if we (or our affiliate or entity acting through us) are no longer willing or able to proceed with, or have determined to abandon or have constructively abandoned, the commercial deployment of the centrifuge technology. Such a commercial purposes license is subject to payment of an agreed upon royalty to us, which will not exceed \$665 million in the aggregate. While our long-term objective is to commercially deploy the American Centrifuge technology when it is commercially feasible to do so, DOE may take the position that we are no longer willing or able to proceed with commercial deployment or have actually or constructively abandoned commercially deployment. On that basis, the

DOE might invoke its rights under the commercial purposes license described above. Any of these actions could have an adverse impact on our business and prospects.

DOE may seek to exercise remedies under this agreement and there is no assurance that the parties will be able to reach agreement on appropriate modifications to the agreements in the future. Moreover, even if the parties reach agreement on modifications to such agreements, there is no assurance that such modifications will not impose material additional requirements, provide DOE with material additional rights or remedies or otherwise affect the overall economics of the American Centrifuge technology and the ability to finance and successfully deploy the technology. Any of these actions could have an adverse impact on our business and prospects.

We face significant competition from four major producers who may be less cost sensitive or may be favored due to national loyalties.

We compete with four major producers of LEU, all of which are wholly or substantially owned by governments: Orano (France), Rosatom/TENEX (Russia), Urenco (the Netherlands, the United Kingdom and two German utilities), and CNEIC (China). Our competitors have greater financial resources than we do. Foreign competitors enjoy financial and other support from their government owners, which may enable them to be less cost- or profit-sensitive than we are. In addition, decisions by foreign competitors may be influenced by political and economic policy considerations rather than commercial considerations. For example, foreign competitors may elect to increase their production or exports of LEU, even when not justified by market conditions, thereby depressing prices and reducing demand for LEU, which could adversely affect our business, results of operations, and prospects. Similarly, the elimination or weakening of existing restrictions on imports from foreign competitors could adversely affect our business, results of operations, and prospects. Moreover, our competitors may be better positioned to take advantage of improved market conditions and increase capacity to meet any future market expansion.

The ability to compete in certain foreign markets may be limited for political, legal and economic reasons.

Agreements for cooperation between the United States government and various foreign governments or governmental agencies control the export of nuclear materials from the United States. If any of the agreements governing exports to countries in which customers are located were to lapse, terminate or be amended, it is possible our sales could be curtailed or terminated or LEU could no longer be delivered to customers in those countries. This could adversely affect our business, results of operations, and prospects.

Purchases of LEU by customers in the European Union are subject to a policy of the Euratom Supply Agency that seeks to limit foreign enriched uranium to no more than 20% of European Union consumption per year. Application of this policy to consumption in the European Union of the LEU that we supply or purchase can significantly limit our ability to make sales to European customers. Additionally, the decision by the United Kingdom to withdraw from the Euratom Supply Agency as a result of its decision to exit the European Union may have an impact on the nuclear industry.

Further, geopolitical events, including domestic or international reactions or responses to such events and subsequent government or international actions including the imposition of sanctions, could also impact our ability to purchase, sell or make deliveries of LEU to customers.

Certain emerging markets lack a comprehensive nuclear liability law that protects suppliers by channeling liability for injury and property damage suffered by third persons from nuclear incidents at a nuclear facility to the facility's operator. To the extent a country does not have such a law and has not otherwise provided nuclear liability protection for suppliers to the projects to which we supply SWU, we intend to negotiate terms in customer contracts that we believe will adequately protect us in a manner consistent with this channeling principle. However, if a customer is unwilling to agree to such contract terms, the lack of clear protection for suppliers in the national laws of these countries could adversely affect our ability to compete for sales to meet the growing demand for LEU in these markets and our prospects for future revenue from such sales.

Changes to, or termination of, any agreements with the U.S. government, or deterioration in our relationship with the U.S. government, could adversely affect results of operations.

We are a party to a number of agreements and arrangements with the U.S. government that are important to our business, including:

- the HALEU contract;
- the lease for the Piketon, Ohio centrifuge facility; and
- the 2002 DOE-USEC Agreement and other agreements that address issues relating to the domestic uranium enrichment industry and centrifuge technology,

Termination, expiration or modification of one or more of these agreements could adversely affect our business and prospects. In addition, deterioration in our relationship with the U.S. agencies that are parties to these agreements could impair or impede our ability to successfully implement these agreements, which could adversely affect our results of operations.

Our success depends on our ability to adapt to a rapidly changing competitive environment in the nuclear industry.

The nuclear industry in general, and the nuclear fuel industry in particular, is in a period of significant change, which could significantly transform the competitive landscape we face. The uranium enrichment sector of the nuclear fuel cycle industry remains oversupplied, creating downward pressures on commodity pricing, with uncertainty regarding nuclear power generation. Changes in the competitive landscape may adversely affect pricing trends, change customer spending patterns, or create uncertainty. To address these changes, we may seek to adjust our cost structure and operations and evaluate opportunities to grow our business organically or through acquisitions and other strategic transactions. We are actively considering, and expect to consider from time to time in the future, potential strategic transactions, which could involve, without limitation, changes in our capital structure, acquisitions and/or dispositions of businesses or assets, joint ventures or investments in businesses, products or technologies. In connection with any such transaction, we may seek additional debt or equity financing, contribute or dispose of assets, assume additional indebtedness, or partner with other parties to consummate a transaction. Any such transaction may not result in the intended benefits and could involve significant commitments of our financial and other resources. Legal and consulting costs incurred in connection with debt or equity financing transactions in development are deferred and subject to immediate expensing if such a transaction becomes less likely to occur. If the actions we take in response to industry changes are not successful, our business, results of operations and financial condition may be adversely affected.

Our business, financial and operating performance could be adversely affected by epidemics and other health related issues but not limited to the novel coronavirus (“COVID-19”) pandemic.

Pandemics and other health crises, such as the global COVID-19 outbreak, may disrupt global supply chains and day-to-day operations of the Company, our suppliers and our customers, which could materially adversely affect our operations. In this regard, global supply chains and the timely availability of products or product components imported from other nations, including SWU contained in LEU we purchase, could be materially disrupted by quarantines, slowdowns or shutdowns, border closings, and travel restrictions resulting from the global COVID-19 pandemic or other global pandemic or health crises. Further, impacts on our management and workforce could adversely impact our business. While we have contingency plans to carry on essential operations, these may not be able to mitigate all of the potential impacts. For example, since much of the work required under the HALEU Contract must be performed at our site, our progress under the HALEU Contract could be impacted in the event employees that are unable to work in-person at our site. These events may result in delays and increased costs in the performance of the HALEU Contract, delays in receiving imports of supplies or other business interruptions and delays which could adversely affect our business, results of operations, and prospects.

Legal and Compliance Risks

Legal and compliance risks relate to risks arising from the government and regulatory environment and action, legal proceedings and compliance with policies and procedures, including those relating to integrity, financial reporting and environmental health and safety. Government and regulatory risk includes the risk that government or regulatory actions will impose additional costs on us or cause us to have to change our business models or practices.

Our operations are highly regulated by the U.S. government, including the NRC and the DOE as well as the States of Ohio and Tennessee.

Our operations, including the facilities we lease in Piketon, Ohio, are subject to regulation by the U.S Nuclear Regulatory Commission (“NRC”). The NRC has granted two licenses for the Piketon facility, i.e. a license for the test facility was granted in February 2004 and a separate license to construct and operate a commercial plant was granted in April 2007. We are currently performing work under contract with DOE for the construction and operations of a cascade to produce HALEU. Prior to the award of the contract we were in process of terminating our licenses and had demobilized programs and processes which are necessary to perform the work. To successfully complete the work in connection with the HALEU project, we withdrew the termination and are pursuing modifications to our NRC license for our commercial plant. There is no assurance that we will be able to re-instate the programs and processes necessary to perform the work in a timely and cost efficient manner. Further we may be unable to gain NRC approval of the necessary license modifications, or gaining such approval may take longer and increase costs.

The NRC also could refuse to renew our license to construct and operate a commercial plant if it determines that: (1) we are foreign owned, controlled or dominated; (2) the issuance of a renewed license would be inimical to the maintenance of a reliable and economic domestic source of enrichment; (3) the issuance of a renewed license would be adverse to U.S. defense or security objectives; or (4) the issuance of a renewed license is otherwise not consistent with applicable laws or regulations in effect at the time of renewal.

The NRC has the authority to issue notices of violation for violations of the Atomic Energy Act of 1954, as amended (the “Atomic Energy Act”), the NRC regulations and conditions of licenses, certificates of compliance, or orders. The NRC has the authority to impose civil penalties or additional requirements and to order cessation of operations for violations of its regulations. Penalties under the NRC regulations could include substantial fines, imposition of additional requirements or withdrawal or suspension of licenses or certificates. Any penalties imposed on us could adversely affect our results of operations and liquidity. The NRC also has the authority to issue new regulatory requirements or to change existing requirements. Changes to the regulatory requirements could also adversely affect our results of operations.

In addition, certain operations at our centrifuge technology development and manufacturing facility in Oak Ridge, Tennessee are subject to regulation by DOE. Our facility in Oak Ridge is also regulated by the State of Tennessee under NRC’s agreement state program. DOE and the State of Tennessee have the authority to impose civil penalties and additional requirements, which could adversely affect our results of operations.

In addition to regulation by the NRC, our operations at the facility in Piketon are subject to regulation by various agencies of the Ohio state government. These state and federal agencies may have the authority to impose civil penalties and additional requirements, which could adversely affect our results of operations.

Our operations involve the use, transportation and disposal of toxic, hazardous and/or radioactive materials and could result in liability without regard to fault or negligence.

Our operations involve the use, transportation and disposal of toxic, hazardous and radioactive materials. A release of these materials could pose a health risk to humans or animals. If an accident were to occur, its severity would depend on the volume of the release and the speed of corrective action taken by emergency response personnel, as well as other factors beyond our control, such as weather and wind conditions. Actions taken in response to an actual or suspected release of these materials, including a precautionary evacuation, could result in significant costs for which we could be legally responsible. In addition to health risks, a release of these materials may cause damage to, or the loss of, property and may adversely affect property values.

We lease facilities from DOE in Piketon, Ohio. Pursuant to the Price-Anderson Act, DOE has indemnified the Company against claims for public liability (as defined in the Atomic Energy Act) arising out of or in connection with activities under those leases resulting from a nuclear incident or precautionary evacuation. If an incident or evacuation is not covered under DOE indemnification, we could be financially liable for damages arising from such incident or evacuation, which could have an adverse effect on our results of operations and financial condition. The DOE indemnification does not apply to incidents outside the United States, including in connection with international transportation of uranium products.

While DOE has provided indemnification pursuant to the Price-Anderson Act, there could be delays in obtaining reimbursement for costs from DOE and DOE may determine that some or all costs are not reimbursable under the indemnification. In addition, the Price-Anderson Act indemnification does not cover loss or damage to property located on the leased facilities due to a nuclear incident. For example, Centrus and Enrichment Corp. have been named as defendants in class action lawsuits alleging damages resulting from releases at the facilities we leased in the past at the Portsmouth Gaseous Diffusion Plant, and the centrifuge facilities we still lease in Piketon, Ohio. These claims include allegations of damages that the plaintiffs assert are not covered by the Price-Anderson Act, which claims we and the other defendants have challenged. If DOE were to determine that the Price-Anderson Act did not apply, we would have to pay all or part of any damages awarded as a result of such claims, the cost to us, including legal fees, could adversely affect our results of operations and financial condition.

In our contracts, we seek to protect ourselves from liability, but there is no assurance that such contractual limitations on liability will be effective in all cases. The costs of defending against a claim arising out of a nuclear incident or precautionary evacuation, and any damages awarded as a result of such a claim, could adversely affect our results of operations and financial condition.

Our failure to maintain compliance with the listing requirements of the NYSE American could result in a delisting of our Class A Common Stock and would impair stockholders' ability to sell or purchase our Class A Common Stock.

On November 17, 2015, we received notice from the NYSE American indicating that the Company was not in compliance with Sections 1003(a)(i) and (ii) of the NYSE American's Company Guide since it reported a stockholders' deficit as of September 30, 2015, and net losses in its fiscal years ended December 31, 2011, 2012 and 2013. On April 28, 2017, the NYSE American informed Centrus that it had regained compliance with the NYSE American's continued listing standards because it had resolved the continued listing deficiency. If the Company falls below any of the NYSE American's continued listing standards in the future, the NYSE American may initiate delisting procedures as appropriate. A delisting of our Class A Common Stock by the NYSE American and the failure of our Class A Common Stock to be listed on another national exchange could have significant adverse consequences. A delisting would likely have a negative effect on the price of our Class A Common Stock and would impair stockholders' ability to sell or purchase our Class A Common Stock. A delisting could also affect our access to capital resources.

Our certificate of incorporation gives us certain rights with respect to equity securities held (beneficially or of record) by foreign persons. If levels of foreign ownership set forth in our certificate of incorporation are exceeded, we have the right, among other things, to redeem or exchange common stock held by foreign persons, and in certain cases, the applicable redemption price or exchange value may be equal to the lower of fair market value or a foreign person's purchase price.

Our certificate of incorporation gives us certain rights with respect to shares of our common stock held (beneficially or of record) by foreign persons. Foreign persons are defined in our certificate of incorporation to include, among others, an individual who is not a U.S. citizen, an entity that is organized under the laws of a non-U.S. jurisdiction and an entity that is controlled by individuals who are not U.S. citizens or by entities that are organized under the laws of non-U.S. jurisdictions.

The occurrence of any one or more of the following events is a "foreign ownership review event" and triggers the board of directors' right to take various actions under our certificate of incorporation: (1) the beneficial ownership by a foreign person of (a) 5% or more of the issued and outstanding shares of any class of our equity securities, (b) 5% or more in voting power of the issued and outstanding shares of all classes of our equity securities, or (c) less than 5% of the issued and outstanding shares of any class of our equity securities or less than 5% of the voting power of the issued and outstanding shares of all classes of our equity securities, if such foreign person is entitled to control the appointment and tenure of any of our management positions or any director; (2) the beneficial ownership of any shares of any class of our equity securities by or for the account of a foreign uranium enrichment provider or a foreign competitor (defined in our certificate of incorporation as a "Contravening Person"); or (3) any ownership of, or exercise of rights with respect to, shares of any class of our equity securities or other exercise or attempt to exercise control of us that is inconsistent with, or in violation of, any regulatory restrictions, or that could jeopardize the continued operations of our facilities (defined in our certificate of incorporation as an "Adverse Regulatory Occurrence"). These rights include requesting information from holders (or proposed holders) of our securities, refusing to permit the transfer of securities by such holders, suspending or limiting voting rights of such holders, redeeming or exchanging shares of our stock owned by such holders on terms set forth in our certificate of incorporation, and taking other actions that we deem necessary or appropriate to ensure compliance with the foreign ownership restrictions.

The terms and conditions of our rights with respect to our redemption or exchange right in respect of shares held by foreign persons or Contravening Persons are as follows:

- *Redemption price or exchange value:* Generally, the redemption price or exchange value for any shares of our common stock redeemed or exchanged would be their fair market value. However, if we redeem or exchange shares held by foreign persons or Contravening Persons and our Board in good faith determines that such person knew or should have known that its ownership would constitute a foreign ownership review event (other than shares for which our Board determined at the time of the person's purchase that the ownership of, or exercise of rights with respect to, such shares did not at such time constitute an Adverse Regulatory Occurrence), the redemption price or exchange value is required to be the lesser of fair market value and the person's purchase price for the shares redeemed or exchanged.
- *Form of payment:* Cash, securities or a combination, valued by our board of directors in good faith.
- *Notice:* At least 30 days written notice of redemption is required; however, if we have deposited the cash or securities for the redemption or exchange in trust for the benefit of the relevant holders, we may redeem shares held by such holders on the same day that we provide notice.

Accordingly, there are situations in which a foreign stockholder or Contravening Person could lose the right to vote its shares or in which we may redeem or exchange shares held by a foreign person or Contravening Person and in which such redemption or exchange could be at the lesser of fair market value and the person's purchase price for the shares redeemed or exchanged, which could result in a significant loss for that person.

Anti-takeover provisions could delay or prevent an acquisition of us.

We are a Delaware corporation, and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third-party to acquire control of our Company, even if a change of control would be beneficial to our existing stockholders. In particular, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which generally prohibits a Delaware corporation from engaging in a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder becomes an “interested” stockholder. Our certificate of incorporation, or charter, establishes restrictions on foreign ownership of our securities. Other provisions of our charter and bylaws may make it more difficult for a third-party to acquire control of us without the consent of our board of directors. These provisions include:

- authorizing “blank check” preferred stock that our board of directors could issue to increase the number of outstanding shares to discourage a takeover attempt;
- not providing for cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- limiting the ability of stockholders to call a special stockholder meeting;
- establishing advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings; and
- providing that our board of directors is expressly authorized to amend, alter, rescind or repeal our by-laws.

These various restrictions could deprive shareholders of the opportunity to realize takeover premiums for their shares.

Also, on April 6, 2016, we adopted a Rights Agreement between the Company and Computershare Trust Company, N.A. and Computershare Inc., as rights agent, as amended by the First Amendment to the Section 382 Rights Agreement dated as of February 14, 2017 (the “Rights Agreement”) in an effort to protect shareholder value by, among other things, attempting to protect against a possible limitation on our ability to use our net operating loss carryforwards and other tax benefits, which may be used to reduce potential future income tax obligations. Pursuant to the terms of the Rights Agreement, if certain persons or groups acquire more than a certain amount of the outstanding shares of our Class A Common Stock, then, subject to certain exceptions, the Rights Agreement would be triggered.

On April 3, 2019, the Company’s Board of Directors approved, and the Company entered into, a Second Amendment to the Rights Agreement (the “Second Amendment”). The Second Amendment, among other things, (i) decreased the purchase price for each one one-thousandth (1/1000th) of a share of the Company’s Series A Participating Cumulative Preferred Stock, par value \$1.00 per share, from \$26.00 to \$18.00 and (ii) extended the Final Expiration Date (as defined in the Rights Agreement) from April 5, 2019 to April 5, 2022.

In addition, the indenture governing our 8.25% Notes includes restrictions on our ability to engage in certain mergers or acquisitions. The indenture governing our 8.25% Notes also requires us to offer to repurchase all such outstanding notes at 101% of their outstanding principal amount in the event of certain change of control events.

These and other provisions could prevent, deter, or make it more difficult for a third party from acquiring us even where the acquisition could be beneficial to stockholders.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters is located at 6901 Rockledge Drive, Suite 800, Bethesda, Maryland 20817, where we lease 24,000 square feet of office space through October 2027. We own a 440,000 square foot manufacturing facility, including supporting office space, on 72 acres at 400 Centrifuge Way, Oak Ridge, Tennessee 37830. We also lease industrial buildings and 110,000 square feet of supporting office space from DOE at 3930 U.S. Route 23, Piketon, Ohio 45661. The industrial buildings encompass more than 14 acres under roof and were built to contain uranium enrichment operations using centrifuge technology. In May 2017, we entered into a lease through July 2021 for 6,000 square feet of office space at 14074 U.S. Highway 23, Waverly, Ohio. We also have short-term leases for small areas of office space in Washington, DC and Tokyo, Japan.

Item 3. Legal Proceedings

From time to time, we are involved in various pending legal proceedings, including the pending legal proceedings described below.

On August 30, 2013, the Company submitted a claim to DOE under the Contract Disputes Act for payment of \$42.8 million, representing DOE's share of pension and postretirement benefits costs related to the transition of Portsmouth site employees to DOE's D&D contractor. On August 27, 2014, the DOE contracting officer denied the Company's claim. As a result, the Company filed an appeal of the decision in the U.S. Court of Federal Claims in January 2015. Centrus believes that DOE is responsible for a significant portion of any pension and postretirement benefit costs associated with the transition of employees at Portsmouth. The receivable for DOE's share of pension and postretirement benefits costs has a full valuation allowance due to the lack of a resolution with DOE and uncertainty regarding the amounts owed and the timing of collection. While proceeding with litigation, the Company is still pursuing settlement.

On May 26, 2019, the Company, its subsidiary United States Enrichment Corp. ("Enrichment Corp."), and five other DOE contractors who have operated facilities at the Portsmouth, Ohio, Gaseous Diffusion Plant site (including, in the case of the Company, the American Centrifuge Plant site located on the premises (the "Portsmouth GDP" site) were named as defendants in a class action complaint filed by Ursula McGlone, Jason McGlone, Julia Dunham, and K.D. and C.D., minor children by and through their parent and natural guardian Julia Dunham (collectively, the "McGlone Plaintiffs") in the U.S. District Court in the Southern District of Ohio, Eastern Division. The complaint seeks damages for alleged off-site contamination allegedly resulting from activities on the Portsmouth GDP site. The McGlone Plaintiffs are seeking to represent a class of (i) all current or former residents within a seven-mile radius of the Portsmouth GDP site and (ii) all students and their parents at the Zahn's Corner Middle School from 1993-present. The Company believes that its operations at the Portsmouth GDP site were fully in compliance with the Nuclear Regulatory Commission's regulations. Further the Company believes that any such liability should be covered by indemnification under the Price-Anderson Act. The Company and Enrichment Corp. have provided notifications to DOE required to invoke indemnification under the Price-Anderson Act and other contractual provisions.

On June 28, 2019, the Company, Enrichment Corp. and four other DOE contractors who have operated facilities at the Portsmouth GDP site were named as defendants in a class action complaint filed by Ray Pritchard and Sharon Melick (collectively, the "Pritchard Plaintiffs") in the U.S. District Court in the Southern District of Ohio, Eastern Division. The complaint seeks damages for alleged off-site contamination allegedly resulting from activities on the Portsmouth GDP site. The Pritchard Plaintiffs are seeking to represent a class of all current or former residents within a seven-mile radius of the Portsmouth GDP site. The Company believes that its operations at the Portsmouth GDP site were fully in compliance with the Nuclear Regulatory Commission's regulations. Further the Company believes that any such liability should be covered by indemnification under the Price-Anderson Act. The Company

and Enrichment Corp. have provided notifications to DOE required to invoke indemnification under the Price-Anderson Act and other contractual provisions.

On November 27, 2019, the Company, Enrichment Corp. and six other DOE contractors who have operated facilities at the Portsmouth GDP site were named as defendants in a class action complaint filed by James Matthews, Jennifer Brownfield Clark, Joanne Ross, the Estate of A.R., and others similarly situated (the “Matthews Plaintiffs”), in the Common Pleas Court of Pike County, Ohio. The complaint seeks injunctive relief, compensatory damages, statutory damages, and any other relief allowed by law for alleged off-site contamination allegedly resulting from activities on the Portsmouth GDP site. The Matthews Plaintiffs expressly contend that the ongoing and continuous releases that injured the Plaintiffs and Class Members are not “nuclear incidents” as that term is defined in the Price-Anderson Act, but rather “freestanding state law claims concerning traditional-style state regulation.” The Company believes that its operations at the Portsmouth GDP site were fully in compliance with the Nuclear Regulatory Commission’s regulations. Further the Company believes that any such liability should be covered by indemnification under the Price-Anderson Act. The Company and Enrichment Corp. have provided notifications to DOE required to invoke indemnification under the Price-Anderson Act and other contractual provisions.

On October 11, 2018, the Company’s subsidiaries, Enrichment Corp. and American Centrifuge Enrichment, LLC (“ACE”, together with Enrichment Corp., the “Company Subsidiaries”) filed proofs of claim in the U.S. Bankruptcy Court for the Northern District of Ohio (the “Bankruptcy Court”) against each of FirstEnergy Nuclear Operating Company (“FENOC”), FirstEnergy Nuclear Generation, LLC (“FENG,” and together with FENOC, the “FirstEnergy Contract Parties”), FirstEnergy Solutions Corp. (“FES”) and FirstEnergy Generation, LLC (“FG”). The claims relate to damages arising from the rejection and breach of a long-term contract between the Company Subsidiaries and the FirstEnergy Contract Parties that was approved by the Bankruptcy Court and made effective as of July 26, 2018. The proofs of claim filed by the Company Subsidiaries include claims against the FirstEnergy Contract Parties based on their liability as parties to the contract that was rejected and breached. The proofs of claim filed by the Company Subsidiaries also include claims against FES and FG based on their liability under guaranties they issued that may obligate FES and FG to satisfy the rejection and breach of contract damages claims.

On November 15, 2019, FENOC, FENG, FES and FG (collectively, the “FirstEnergy Debtors”) filed objections to the Company Subsidiaries’ claims in the Bankruptcy Court. No decision on the claims has yet been reached by the Bankruptcy Court. The Company Subsidiaries and the FirstEnergy Debtors have submitted cross motions for summary judgment on the issue of whether the guaranties apply. On March 13, 2020, the Bankruptcy Court ruled in favor of the FirstEnergy Debtors on their motion, finding that the guaranties did not apply to the Company Subsidiaries’ claims. The Company is considering its appeal rights. The ruling does not apply to the Company Subsidiaries’ claims against the FirstEnergy Contract Parties.

We are subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, other than the above, we do not believe that the outcome of any of these legal matters, individually or in the aggregate, will have a material adverse effect on our cash flows, results of operations or consolidated financial condition.

Item 4. Mine Safety Disclosures

None.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The Company's certificate of incorporation authorizes 100,000,000 shares of common stock, consisting of 70,000,000 shares of Class A common stock, \$0.10 par value per share (the "Class A Common Stock") and 30,000,000 shares of Class B common stock, \$0.10 par value per share (the "Class B Common Stock," and together with the Class A Common Stock, the "Common Stock"). As of March 2, 2020, the Company has issued 9,472,389 shares of Common Stock, consisting of 8,673,976 shares of Class A Common Stock and 798,413 shares of Class B Common Stock. The Class B Common Stock was issued to Toshiba America Nuclear Energy Corporation ("Toshiba") and Babcock & Wilcox Investment Company ("B&W") and has the same rights, powers, preferences and restrictions and ranks equally in all matters with the Class A Common Stock, except voting. Holders of Class B Common Stock are entitled to elect, in the aggregate, two members of the Board of Directors of the Company, subject to certain holding requirements. Additionally, the Company has reserved 1,200,000 shares of Class A Common Stock under its management incentive plan, of which approximately 422,000 shares were available for future awards as of December 31, 2019, including approximately 120,000 shares associated with awards which terminated or were cancelled without being exercised.

The Class A Common Stock trades on the NYSE American under the symbol "LEU".

As of March 2, 2020, there were 8,673,976 shares of Class A Common Stock outstanding. As of March 2, 2020, there were approximately 930 holders of record and approximately 6,986 beneficial owners of the Company's Class A Common Stock. As of March 2, 2020, there were two holders of record of the Company's Class B Common Stock.

No cash dividends were paid in 2018 or 2019, and we have no intention to pay cash dividends in the foreseeable future. Our Series B Preferred Stock provides that so long as any shares of our Series B Preferred Stock are outstanding, we may not pay dividends on our Class A Common Stock (other than dividends payable in shares of Class A Common Stock). In addition, the indenture governing our 8.25% Notes, subject to certain exceptions, places certain restrictions on the ability of Enrichment Corp. to transfer cash and other assets to us. This could act as an additional constraint on our ability to pay dividends on our Class A Common Stock.

In addition, we are obligated to pay cash dividends on our Series B Preferred Stock to the extent that (1) our pension plans and Enrichment Corp.'s pension plans are at least 90% funded on a variable rate premium calculation in the current plan year, (2) our net income calculated in accordance with U.S. GAAP (excluding the effect of pension remeasurement) for the immediately preceding fiscal quarter exceeds \$7.5 million, (3) our free cash flow (defined as the sum of cash provided by (used in) operating activities and cash provided by (used in) investing activities) for the immediately preceding four fiscal quarters exceeds \$35.0 million, (4) the balance of cash and cash equivalents calculated in accordance with U.S. GAAP on the last day of the immediately preceding quarter would exceed \$150.0 million after pro forma application of the dividend payment, and (5) dividends may be legally payable under Delaware law. We did not meet the criteria for a dividend payment obligation for the year ended December 31, 2019, and we have not declared, accrued or paid dividends on the Series B Preferred Stock since issuance on February 14, 2017.

There were no unregistered sales of equity securities by the Company during the years ended December 31, 2019 or 2018.

Fourth Quarter 2019 Issuer Repurchases of Equity Securities

None.

Matters Affecting our Foreign Stockholders

In order to aid in our compliance with our NRC license, our certificate of incorporation gives us certain rights with respect to shares of our Common Stock held (beneficially or of record) by foreign persons. Foreign persons are defined in our certificate of incorporation to include, among others, an individual who is not a U.S. citizen, an entity that is organized under the laws of a non-U.S. jurisdiction and an entity that is controlled by individuals who are not U.S. citizens or by entities that are organized under the laws of non-U.S. jurisdictions.

The occurrence of any one or more of the following events is a “foreign ownership review event” and triggers the board of directors’ right to take various actions under our certificate of incorporation: (1) the beneficial ownership by a foreign person of (a) 5% or more of the issued and outstanding shares of any class of our equity securities, (b) 5% or more in voting power of the issued and outstanding shares of all classes of our equity securities, or (c) less than 5% of the issued and outstanding shares of any class of our equity securities or less than 5% of the voting power of the issued and outstanding shares of all classes of our equity securities, if such foreign person is entitled to control the appointment and tenure of any of our management positions or any director; (2) the beneficial ownership of any shares of any class of our equity securities by or for the account of a foreign uranium enrichment provider or a foreign competitor (referred to as “contravening persons”); or (3) any ownership of, or exercise of rights with respect to, shares of any class of our equity securities or other exercise or attempt to exercise control of us that is inconsistent with, or in violation of, any regulatory restrictions, or that could jeopardize the continued operations of our facilities (an “adverse regulatory occurrence”). These rights include requesting information from holders (or proposed holders) of our securities, refusing to permit the transfer of securities by such holders, suspending or limiting voting rights of such holders, redeeming or exchanging shares of our stock owned by such holders on terms set forth in our certificate of incorporation, and taking other actions that we deem necessary or appropriate to ensure compliance with the foreign ownership restrictions.

For information regarding the foreign ownership restrictions set forth in our certificate of incorporation, please refer to — Part I, Item 1A, *Risk Factors - Our certificate of incorporation gives us certain rights with respect to equity securities held (beneficially or of record) by foreign persons. If levels of foreign ownership set forth in our certificate of incorporation are exceeded, we have the right, among other things, to redeem or exchange common stock held by foreign persons, and in certain cases, the applicable redemption price or exchange value may be equal to the lower of fair market value or a foreign person’s purchase price.*

Item 6. Selected Financial Data

Not provided as a smaller reporting company as defined in Rule 12b-2 of the Exchange Act.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with, and is qualified in its entirety by reference to, the consolidated financial statements and related notes appearing elsewhere in this report. See also the section titled "Forward-Looking Statements."

Overview

Centrus Energy Corp., a Delaware corporation ("Centrus" or the "Company"), is a trusted supplier of nuclear fuel and services for the nuclear power industry. References to "Centrus", the "Company", "our", or "we" include Centrus Energy Corp. and its wholly owned subsidiaries as well as the predecessor to Centrus, unless the context otherwise indicates.

Centrus operates two business segments: (a) low-enriched uranium ("LEU"), which supplies various components of nuclear fuel to utilities, and (b) technical solutions, which provides advanced engineering, design, and manufacturing services to government and private sector customers. The technical solutions segment was formerly our contract services segment. The segment was renamed the technical solutions segment on December 31, 2019, to better reflect the nature of work performed and is consistent with our marketing of service offerings as Centrus Technical Solutions. There was no change to the composition of the segment as a result of the re-naming.

Our LEU segment provides most of the Company's revenue and involves the sale of LEU, its components, and natural uranium to utilities operating commercial nuclear power plants. LEU is a critical component in the production of nuclear fuel for reactors that produce electricity. We supply LEU to both domestic and international utilities for use in nuclear reactors worldwide. We provide LEU from multiple sources including our inventory, medium- and long- term supply contracts and spot purchases. As a long-term supplier of LEU to our customers, our objective is to provide value through the reliability and diversity of our supply sources. Our long-term goal is to resume commercial enrichment production, and we are exploring approaches to that end.

Our technical solutions segment utilizes the unique technical expertise, operational experience and specialized facilities that we developed over nearly two decades as part of our uranium enrichment technology program. We are leveraging these capabilities to expand and diversify our business beyond uranium enrichment, offering new services to existing and new customers in complementary markets.

With the specialized capabilities and workforce at our Technology and Manufacturing Center in Oak Ridge, Tennessee, we are performing technical, engineering and manufacturing services for a range of commercial and government customers and actively working to secure new customers. Our experience developing, licensing, manufacturing and operating advanced nuclear components and systems positions us to provide critical design, engineering, manufacturing and other services to a broad range of potential clients, including those involving sensitive or classified technologies. This work includes design, engineering, manufacturing and licensing services support for advanced reactor and fuel fabrication projects as well as decontamination and decommissioning ("D&D") work.

With several decades of experience in enrichment, we continue to be a leader in the development of an advanced U.S. uranium enrichment technology, which we believe could play a critical role in supplying fuel for advanced reactors, meeting U.S. national and energy security needs, and achieving our nation's nonproliferation objectives.

On October 31, 2019, we signed a three-year cost-share contract (the "HALEU Contract") with DOE to deploy a cascade of centrifuges to demonstrate production of high-assay, low-enriched uranium ("HALEU") fuel with existing United States origin enrichment technology and provide DOE with HALEU for near term use in its research and development for the advancement of civilian nuclear energy and national security, as well as other programmatic missions. The program has been under way since May 31, 2019, when the Company and DOE signed a preliminary agreement that allowed work to begin while the HALEU Contract was being finalized.

Under the HALEU Contract, DOE agreed to reimburse the Company for 80% of its costs incurred in performing the contract, up to a maximum of \$115 million. The Company's cost share is the corresponding 20% and any costs incurred above these amounts. Costs under the HALEU Contract include *program costs*, including direct labor and materials and associated indirect costs that are classified as *Cost of Sales*, and an allocation of corporate costs supporting the program that are classified as *Selling, General and Administrative Expenses*. Services to be provided over the three-year contract include constructing and assembling centrifuge machines and related infrastructure in a cascade formation. When estimates of remaining program costs to be incurred for such an integrated, construction-type contract exceed estimates of total revenue to be earned, a provision for the remaining loss on the contract is recorded to *Cost of Sales* in the period the loss is determined. Our corporate costs supporting the program are recognized as expense as incurred over the duration of the contract term. As of December 31, 2019, the portion of our anticipated cost share under the HALEU Contract representing our share of remaining projected program costs was recognized in *Cost of Sales* as an accrued loss of \$18.3 million. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections.

HALEU is a component of an advanced nuclear reactor fuel that is not commercially available today and may be required for a number of advanced reactor designs currently under development in both the commercial and government sectors. Existing reactors typically operate on LEU with the uranium-235 isotope concentration below 5%. HALEU has a uranium-235 concentration ranging from 5% to 20%, giving it several potential technical and economic advantages. For example, the higher concentration of uranium-235 means that fuel assemblies and reactors can be smaller and reactors will require less frequent refueling. Reactors can also achieve higher "burnup" rates, meaning a smaller volume of fuel will be required overall and less waste will be produced. HALEU may also be used in the future to fabricate next-generation fuel forms for the existing fleet of reactors in the United States and around the world. These new HALEU-based fuels could improve the economics of nuclear reactors and inherent safety features while increasing the amount of electricity that can be generated at existing reactors. HALEU fuel may also ultimately be used in new commercial and government applications in the future, such as reactors for the military.

We believe our investment in the HALEU technology will position the Company to meet the needs of our customers in the future as they deploy advanced reactors and next generation fuels. By investing in HALEU technology now, and as the only domestically-owned company with HALEU enrichment capability, we believe the Company could be well positioned to capitalize on a potential new market as the demand for HALEU-based fuels increases with the development of advanced reactors. There are no guarantees about whether or when government or commercial demand for HALEU will materialize, and there are a number of technical, regulatory and economic hurdles that must be overcome for these fuels and reactors to come to the market.

The nuclear industry in general, and the nuclear fuel industry in particular, is in a period of significant change, which continues to affect the competitive landscape. In the years following the 2011 Fukushima accident, the published market prices for uranium enrichment declined more than 75%. While the monthly price indicators have gradually started to increase beginning in 2018, the uranium enrichment segment of the nuclear fuel market remains oversupplied and faces uncertainty about future demand for nuclear power generation. Changes in the competitive landscape affect pricing trends, change customer spending patterns, and create uncertainty. To address these changes, we have taken steps to adjust our cost structure and may seek further adjustments to our cost structure and operations and to evaluate opportunities to grow our business organically or through acquisitions and other strategic transactions.

We are also actively considering, and expect to consider from time to time in the future, potential strategic transactions, which could involve, without limitation, acquisitions and/or dispositions of businesses or assets, joint ventures or investments in businesses, products or technologies or changes to our capital structure. In connection with any such transaction, we may seek additional debt or equity financing, contribute or dispose of assets, assume additional indebtedness, or partner with other parties to consummate a transaction.

Refer to Part I, Item 1, *Business*, for additional information.

Market Conditions and Outlook

The global nuclear industry outlook has begun to improve after many years of decline or stagnation. The development of advanced small and large-scale reactors, innovative advanced fuel types, and the commitment of nations to begin deploying or to increase the share of nuclear power in their nations has created optimism in the market. Part of the momentum has resulted from efforts to lower greenhouse gas emissions to combat climate change and improve health and safety. The industry continues to face headwinds, however, as low cost electricity generation sources, resistance to nuclear power, and the high costs of deploying nuclear power impede expansion of the nuclear industry. Threats of trade actions that could impact the nuclear fuel supply chain is an overhang on the industry.

While a majority of the growth of nuclear power remains centered in China, India and Russia, the United States, with 96 commercial reactors in operation, remains the world's largest market for nuclear fuel, but the U.S. industry remains under some duress due to low cost natural gas prices and an increase in the expansion of renewable sources, all of which have put financial pressure on some reactor operators. Eight reactors have been shut down in the U.S. in recent years and several more face the prospect of premature shut down in the near-term.

The industry continues to attempt to recover from the March 2011 incident in Fukushima, Japan, that occurred from an earthquake and tsunami that caused irreparable damage to four reactors in Fukushima. As a consequence, approximately 60 reactors in Japan and Germany were taken offline, and other countries curtailed or slowed their construction of new reactors or accelerated their retirement of existing plants. While some reactors in Japan have restarted and many are expected to restart during the next five years, supply and demand dynamics for nuclear fuel continue to be somewhat depressed.

While the market for uranium enrichment for nuclear fuel is expected to remain oversupplied into the 2020s, the market is expected to grow as the nuclear power industry expands around the world. During 2019, prices for nuclear fuel, especially conversion and enrichment, have risen significantly. According to the World Nuclear Association, around 10% of the world's electricity is generated by about 440 nuclear reactors, and an additional 50 or so reactors are under construction. During 2020, two nuclear new build nations are expected to start their first commercial reactors. The new reactor builds will have the potential to improve market conditions in the long-term.

Revenue

We have two reportable segments: the LEU segment and the technical solutions segment.

Revenue from our LEU segment is derived primarily from:

- sales of the SWU component of LEU;
- sales of both the SWU and uranium components of LEU; and
- sales of natural uranium.

Our technical solutions segment reflects our technical, manufacturing, engineering and operations services offered to public and private sector customers, including engineering and testing activities as well as technical and resource support currently being performed by the Company. This includes our agreement with DOE to demonstrate HALEU production and a variety of other contracts with public and private sector customers.

SWU and Uranium Sales

Revenue from our LEU segment accounted for approximately 81% of our total revenue in 2019. The majority of our customers are domestic and international utilities that operate nuclear power plants, with international sales constituting approximately one-third of revenue from our LEU segment in recent years. Our agreements with electric utilities are primarily long-term, fixed-commitment contracts under which our customers are obligated to purchase a specified quantity of the SWU component of LEU from us. Our agreements for natural uranium and

enriched uranium product sales, where we sell both the SWU and uranium component of LEU, are generally shorter-term, fixed-commitment contracts.

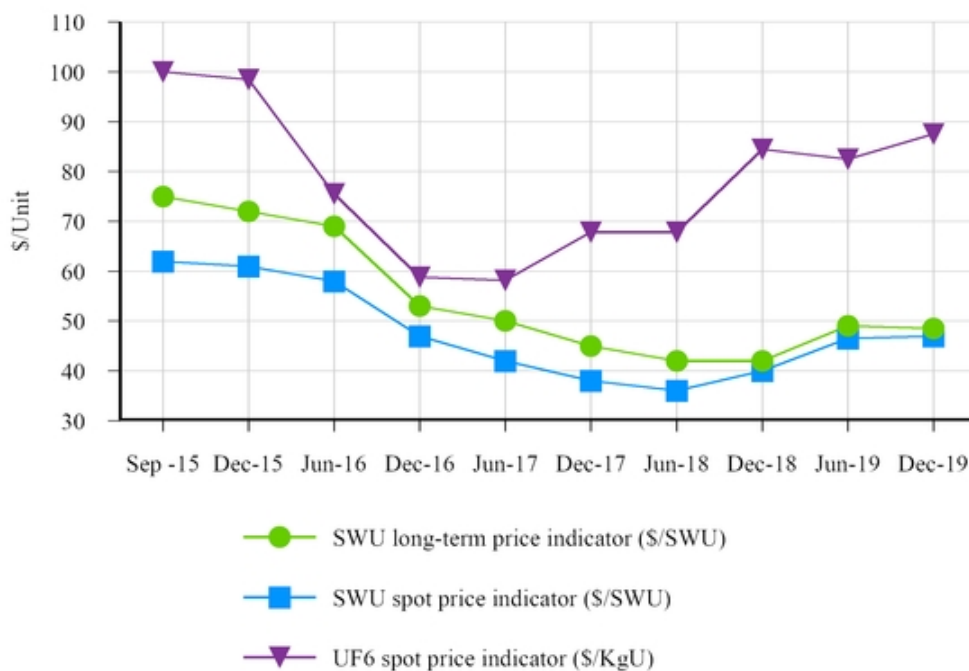
Our revenues, operating results and cash flows can fluctuate significantly from quarter to quarter and year to year. Revenue is recognized at the time LEU or uranium is delivered under the terms of our contracts. The timing of customer deliveries is affected by, among other things, electricity markets, reactor operations, maintenance and refueling outages, and customer inventories. In the current market environment, some customers are building inventories and may choose to take deliveries under annual purchase obligations later in the year. Customer payments for the SWU component of LEU average roughly \$10 million per order. As a result, a relatively small change in the timing of customer orders for LEU may cause significant variability in operating results.

Utility customers in general have the option to defer receipt of uranium products purchased from Centrus beyond the contractual sale period, resulting in the deferral of costs and revenue recognition. Refer to *Note 2, Revenue and Contracts with Customers*, in the consolidated financial statements for further details.

Our financial performance over time can be significantly affected by changes in prices for SWU and uranium. Since 2011, market prices for SWU and uranium have significantly declined. Since our sales order book includes contracts awarded to us in previous years, the average SWU price billed to customers typically lags behind published price indicators by several years. While newer sales reflect the low prices prevalent in recent years, certain contracts included in our order book have sales prices that are significantly above current market prices.

The long-term SWU price indicator, as published by TradeTech, LLC in *Nuclear Market Review*, is an indication of base-year prices under new long-term enrichment contracts in our primary markets. The following chart summarizes TradeTech’s long-term and spot SWU price indicators, and TradeTech’s spot price indicator for natural uranium hexafluoride (“UF6”):

SWU and Uranium Market Price Indicators*



* Source: *Nuclear Market Review*, a TradeTech publication, www.uranium.info

Our contracts with customers are primarily denominated in U.S. dollars, and although revenue has not been directly affected by changes in the foreign exchange rate of the U.S. dollar, we may have a competitive price advantage or disadvantage obtaining new contracts in a competitive bidding process depending upon the weakness or strength of the U.S. dollar. Costs of our primary competitors are denominated in other currencies. Our contracts with suppliers have historically been denominated in U.S. dollars. In 2018, however, we entered into an agreement with Orano Cycle (“Orano”) for the long-term supply of SWU. We may elect to begin deliveries as early as 2021. Purchases under the contract with Orano will be payable in a combination of U.S. dollars and euros and we may be subject to exchange rate risk for the portion of purchases payable in euros.

On occasion, we will accept payment in the form of uranium. Revenue from the sale of SWU under such contracts is recognized at the time LEU is delivered and is based on the fair value of the uranium at contract inception, or as the quantity of uranium is finalized, if variable.

Cost of sales for SWU and uranium is based on the amount of SWU and uranium sold and delivered during the period and unit inventory costs. Unit inventory costs are determined using the average cost method. Changes in purchase costs have an effect on inventory costs and cost of sales over current and future periods. Cost of sales includes costs for inventory management at off-site licensed locations. Cost of sales also includes certain legacy costs related to former employees of the Portsmouth and Paducah gaseous diffusion plants.

Market Uncertainties

Imports into the United States of LEU and other uranium products produced in the Russian Federation, including LEU imported by Centrus under the Russian Supply Agreement, are subject, through December 31, 2020, to quotas imposed under legislation enacted into law in September 2008 and under the 1992 Russian Suspension Agreement (“RSA”), as amended in 2008. These quotas limit the amount of Russian LEU that can be imported into the United States for U.S. consumption.

The U.S. Department of Commerce (“DOC”) is currently conducting an administrative review of the current status of, and compliance with, the RSA during the period October 2017 through September 2018 (the “Second Administrative Review”) and in December 2019, initiated another review of the period October 2018 through September 2019 (the “Third Administrative Review”). In an earlier review (the “First Administrative Review”), which covered the period October 2016 through September 2017 and was completed in December 2017, the DOC found that TENEX, Centrus and others had complied with the terms of the RSA during the period of review, but deferred until the Second Administrative Review any decision on whether the RSA continues to meet the statutory requirements that the RSA (i) prevent the suppression or undercutting of price levels of domestic uranium products and (ii) continue to be in the public interest. In a preliminary determination in the Second Administrative Review, issued in December 2019, the DOC again found that Centrus and others had complied with the RSA, but again deferred making a determination on the statutory requirements, which it said would be addressed in a post-preliminary analysis, which has yet to be issued. A final determination in the Second Administrative Review is expected to be issued in June 2020.

If, in the final determination of the Second Administrative Review, the DOC finds evidence either of non-compliance with the RSA, or that the statutory requirements are no longer being met, it could terminate the RSA, reinstate the antidumping investigation that the RSA suspended, and begin collecting duties in excess of 115% of the value of imports of Russian uranium products, including the LEU that the Company imports under the Russian Supply Agreement.

In February 2019, the DOC formally opened negotiations with the Russian Federation State Atomic Energy Corporation (Rosatom) with respect to a possible extension of the term of the RSA. In connection with these negotiations, the DOC is seeking a significant extension of the RSA. We are working with industry stakeholders and others to ensure that the extension will include sufficient quota to allow all existing contracts with TENEX, including the Russian Supply Agreement, to be fully implemented, but it is possible that the terms of the extension will not expressly protect our ability to import LEU under the Russian Supply Agreement or require that available quota be allocated to those imports.

An extension of the RSA would continue the existing suspension of the antidumping investigation and therefore not require payment of the duties or duty deposits described above, as long as the suspension remained in place. Centrus does not currently have in place any agreement with TENEX to share quotas that may apply after 2020, when the existing quotas terminate. Unless the RSA extension provides for sufficient quota or other relief that would allow Centrus to deliver in the United States all the Russian LEU that we procure under the Russian Supply Agreement, (i) our ability to meet our commitments under our order book and to obtain new sales commitments would be substantially jeopardized, and (ii) our ability to earn revenues with the Russian LEU we are required to procure under the Russian Supply Agreement would be substantially reduced. As a result, we would lose both revenue and market share to our competitors.

Similarly, if, instead of an extension of the RSA, the DOC reached adverse final determination in the Second Administrative Review and elected to restart the antidumping investigation of Russian uranium products, including LEU, we would be obligated to deposit funds with the U.S. government to cover potential duties (and potentially pay antidumping duties on a going-forward basis if the antidumping investigation resulted in an antidumping order) that would render the LEU containing the SWU that we purchase under the Russian Supply Agreement too expensive to place into the market. Such an outcome would cause us to incur significant losses in fulfilling our existing contracts, and make it commercially challenging to win new contracts using the Russian LEU.

As a result of the uncertainty regarding the outcome the pending trade matter, customers may be reluctant to contract long-term for material from the Company and the Company may not be able to secure adequate alternative supplies. Further, the outcome of the pending trade matter could materially impact future demand and market prices. For further details, refer to Part I, Item 1A, *Risk Factors - Restrictions on imports or sales of LEU or SWU that we buy could adversely affect profitability and the viability of our business.*

Technical Solutions

Our technical solutions segment reflects our technical, manufacturing, engineering and operations services offered to public and private sector customers, including the American Centrifuge engineering and testing activities we have performed as a contractor for UT-Battelle and the engineering, procurement, construction, manufacturing and operations services being performed under the HALEU Contract. With our private sector customers, we seek to leverage our domestic enrichment experience, engineering know-how, and precision manufacturing facility to assist customers with a range of engineering, design, and advanced manufacturing projects including the production of fuel for next-generation nuclear reactors and the development of related facilities.

Government Contracting

On October 31, 2019, we signed the three-year cost-share HALEU Contract with DOE to deploy a cascade of centrifuges to demonstrate production of HALEU for advanced reactors. The program has been under way since May 31, 2019, when the Company and DOE signed an interim HALEU letter agreement that allowed work to begin while the full contract was being finalized.

Under the HALEU Contract, DOE agreed to reimburse the Company for 80% of its costs incurred in performing the contract, up to a maximum of \$115 million. The Company's cost share is the corresponding 20% and any costs incurred above these amounts. As described in *Overview* above, the portion of our anticipated cost share under the HALEU Contract representing our share of remaining projected program costs was recognized in *Cost of Sales* as an accrued loss of \$18.3 million as of December 31, 2019. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections. The HALEU Contract is incrementally funded and DOE is currently obligated for costs up to approximately \$53.2 million of the \$115 million. The Company received cash payments of \$10.7 million through December 31, 2019.

Costs under the HALEU Contract include program costs, including direct labor and materials and associated indirect costs that are classified as *Cost of Sales*, and an allocation of corporate costs supporting the program that are classified as *Selling, General and Administrative Expenses*. Services to be provided over the three-year contract include constructing and assembling centrifuge machines and related infrastructure in a cascade formation. When estimates of total program costs to be incurred for such an integrated, construction-type contract exceed estimates of total revenue to be earned, a provision for the entire loss on the contract is recorded to *Cost of Sales* in the period the loss is determined, and is reflected in *Current Liabilities*. Provisions for contract losses are reviewed regularly based on actual results and remaining cost projections. Our corporate costs supporting the program are recognized as expense as incurred over the duration of the contract term.

Effective June 1, 2019 with the commencement of the HALEU work, ongoing costs of the Piketon facility that are included in *Advanced Technology Costs* on the consolidated statement of operations prior to June 1, 2019, are included in *Cost of Sales* of the technical solutions segment.

Over the past five years, our government contracts with UT-Battelle have provided for engineering and testing work on the American Centrifuge technology at our facilities in Oak Ridge, Tennessee. Our completed fixed-price contract with UT-Battelle for the period from October 1, 2017, through September 30, 2018, generated revenue of approximately \$16.0 million upon completion of defined milestones. Although the contract expired September 30, 2018, we continued to perform work towards the expected milestones as the parties worked toward a successor agreement. Costs for work performed in the first quarter of 2019 were classified as *Cost of Sales*. As the scope of work became viewed as more limited than originally anticipated, costs for work performed in the second quarter and most of the third quarter of 2019 were classified as *Advanced Technology Costs*. A successor fixed-price agreement was entered into with UT-Battelle in September 2019 and was completed in 2019 resulting in revenue of \$1.2 million. In February 2020, an additional \$4.4 million fixed-price agreement was entered into with UT-Battelle with a milestone deliverable in the second quarter of 2020.

We continue to invest in advanced technology because of the potential for future growth into new areas of business for the Company, while also preserving our unique workforce at our Technology and Manufacturing Center in Oak Ridge, Tennessee.

On September 27, 2018, we leveraged our D&D experience and entered into an agreement with DOE to decontaminate and decommission the K-1600 facility located at the East Tennessee Technology Park. Under the terms of the agreement, pursuant to a work authorization under our lease with DOE, we were required to remove and dispose of government owned materials and equipment in order to render the facility radiologically uncontaminated and unclassified. The contract was a cost-plus fixed fee contract totaling approximately \$15 million. The Company announced that it had successfully completed D&D of the facility on October 9, 2019. In connection with the substantial completion of the work, we terminated our lease with DOE for the K-1600 facility on September 30, 2019.

In addition, we have entered into other contracts with DOE, other agencies and their contractors to provide engineering, design and manufacturing services.

Commercial Contracting

In March 2018, we entered into a services agreement with X Energy, LLC (“X-energy”) to provide X-energy with technical and resource support for criticality safety evaluation of processing equipment, design of fresh fuel transport packages, and conceptual mock-up of a nuclear fuel production facility. In November 2018, we entered into a second services agreement with X-energy to provide technical and resource support to the design and license application development of its nuclear fuel production facility. Under both agreements, we provide X-energy with non-cash in-kind contributions subject to a cooperative agreement between X-energy and the United States government. In November 2019, the parties extended the period of performance through June 30, 2020.

Under the X-energy agreements, services are performed pursuant to separate task orders issued and provide for time-and-materials based pricing. The cumulative value of task orders issued calls for payments to us of \$11.9 million and in-kind contributions to be provided by us of \$6.5 million. Revenue in 2018-2019 for payments received or pending totaled \$9.5 million, and in-kind contributions provided by us totaled \$5.0 million.

In addition, we have entered into other contracts for the engineering, design, and advanced manufacturing services with other commercial entities.

Prior Site Services Work

We formerly performed sites services work under contracts with DOE and its contractors at the former Portsmouth (Ohio) and Paducah (Kentucky) Gaseous Diffusion Plants. In January 2018, we entered into a settlement agreement with DOE and the U.S. government regarding breach of contract claims brought by the Company relating to this work. In connection with the settlement, the Company (a) received \$4.7 million from the U.S. government, (b) applied approximately \$19.3 million of advances from the U.S. government received in prior years against the receivables balance, and (c) recorded additional revenue of \$9.5 million in the first quarter of 2018.

The Company and DOE have yet to fully settle the Company’s claims for reimbursements for certain pension and postretirement benefits costs related to past contract work performed at the Portsmouth and Paducah plant sites. There is the potential for additional income to be recognized for this work pending the outcome of legal proceedings related to the Company’s claims for payment and the potential release of previously established valuation allowances on receivables. Refer to Part II, Item 1, *Legal Proceedings*, for additional information.

2020 Outlook

On March 11, 2020, the World Health Organization declared the novel strain of coronavirus (COVID-19) a global pandemic and recommended containment and mitigation measures worldwide. The Company is taking actions to protect its workforce and maintain critical operations. Travel, operational and other restrictions imposed by the U.S. and foreign governments may impact our ability to make future sales and may impact the ability of our suppliers, including our suppliers of low enriched uranium, to perform their contracts. As of the date of this filing, our LEU segment operations have not been affected and we are working with our suppliers, fabricators and customers to monitor the situation closely.

Further, on March 22, 2020, Ohio Governor Mike DeWine issued a “Stay at Home” order (the “Ohio Order”) effective at 11:59 pm on March 23, 2020. The Order prohibits holding gatherings of any size and closes all nonessential Ohio businesses. Other states and counties, including Maryland, have issued similar versions of the stay at home order and we expect other states and counties to do so in the coming days. As a result, the Company has instituted measures such as expanded telework to protect our workforce, to comply with government orders, and to maintain critical operations. Not all work, however, can be performed remotely. Consequently, we have instituted limited operations for personnel working on the HALEU program at Piketon, Ohio, to maintain critical systems and security. Further, the actions taken by government regulatory agencies to protect their workforce may impact our ability to obtain the necessary reviews and approvals to complete the project. At this time, other than the restrictions

on a limited number of our employees at the Piketon, Ohio facility, our Technical Solutions segment operations, has not been significantly affected. We are working closely with the Department of Energy and we are continuing to work to make progress while implementing measures to protect our workforce.

Since we cannot reasonably estimate the length or severity of this pandemic, or the extent to which the disruption may materially impact our consolidated financial position, consolidated results of operations, and consolidated cash flows in fiscal 2020, we are not providing guidance on the Company's financial results for 2020 at this time.

Critical Accounting Policies and Estimates

Our significant accounting policies are summarized in *Note 1, Summary of Significant Accounting Policies*, of our consolidated financial statements, which were prepared in accordance with generally accepted accounting principles. Generally accepted accounting principles and related accounting pronouncements, implementation guidelines and interpretations with regard to a wide range of matters that are relevant to our business are complex and involve many subjective assumptions, estimates and judgments that are, by their nature, subject to substantial risks and uncertainties. Critical accounting estimates are those that require management to make assumptions about matters that are uncertain at the time the estimate is made and for which different estimates, often based on complex judgments, probabilities and assumptions that we believe to be reasonable, but are inherently uncertain and unpredictable, could have a material impact on our operating results and financial condition. It is also possible that other professionals, applying their own judgment to the same facts and circumstances, could develop and support a range of alternative estimated amounts. We are also subject to risks and uncertainties that may cause actual results to differ from estimated amounts, such as the healthcare environment, legislation and regulation. Additionally, changes in accounting rules or their interpretation could significantly affect our results of operations and financial condition.

The sensitivity analyses used below are not intended to provide a reader with our predictions of the variability of the estimates used. Rather, the sensitivities used are included to allow the reader to understand a general cause and effect of changes in estimates.

We have identified the following to be our critical accounting estimates:

Revenue Recognition - Technical Solutions

Revenue for the technical solutions segment, principally representing technical, manufacturing, engineering, procurement, construction and operations services offered to public and private sector customers, is recognized over the contractual period as services are rendered. The Company recognizes revenue over time as it performs on these contracts because of the continuous transfer of control to the customer. For public sector contracts, this continuous transfer of control to the customer is supported by clauses in the contract that allow the customer to unilaterally terminate the contract for convenience, pay the Company for costs incurred plus a reasonable profit and assume control of any work in progress. The Company's private sector contracts generally contain contractual termination clauses or entitle the Company to payments for work performed to date for goods and services that do not have an alternative use. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. A contract may contain one or more performance obligations. Two or more promises to transfer goods or services to a customer may be considered a single performance obligation if the goods or services are highly interdependent or highly interrelated such that utility of the promised goods or services to the customer includes integration services provided by the Company.

The Company determines the transaction price for each contract based on the consideration it expects to receive for the products or services being provided under the contract. If transaction prices are not stated in the contract for each performance obligation, contractual prices are allocated to performance obligations based on estimated relative standalone selling prices of the promised services.

The Company generally uses the cost-to-cost input method of progress for performance obligations to deliver products with continual transfer of control to the customer, because it best depicts the transfer of control to the

customer that occurs as the Company incurs costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of direct costs incurred to date to the total estimated direct costs at completion of the performance obligation. Revenues are recorded proportionally as costs are incurred. For performance obligations to provide services to the customer, revenue is recognized over time based on direct costs incurred or the right to invoice method (in situations where the value transferred matches the Company's billing rights) as the customer receives and consumes the benefits.

Use of the cost-to-cost method requires the Company to make reasonably dependable estimates regarding the revenue and costs associated with the design, manufacture and delivery of products and services. Significant judgment is used to estimate total revenue and costs at completion. As a significant change in one or more estimates could affect the profitability of the Company's contracts, the Company reviews and updates its contract-related estimates regularly. Adjustments in estimated profits/losses are recognized under the cumulative catch-up method. Under this method, the impact of the adjustments is recognized in the period the adjustment is recognized. When estimates of total costs to be incurred exceed total estimates of revenue to be earned on a performance obligation related to complex equipment or related services, a provision for the entire loss on the performance obligation is recognized in the period the loss is identified.

Asset Valuations

The accounting for SWU and uranium inventories includes estimates and judgments. SWU and uranium inventory costs are determined using the average cost method. Inventories of SWU and uranium are valued at the lower of cost or net realizable value ("NRV"). NRV is the estimated selling price in the ordinary course of business less reasonably predictable costs of completion, disposal, and transportation. The estimated selling price for SWU and uranium is based on the pricing terms of contracts in our sales order book, and, for uranium not under contract, the estimated selling price is based primarily on published price indicators at the balance sheet date.

Intangible assets originated from our reorganization and application of fresh start accounting as of September 30, 2014. The intangible assets represented the fair value adjustment to the assets and liabilities for our LEU segment. The identifiable intangible assets relate to our order book and customer relationships. The order book intangible asset is amortized as the order book valued at emergence is reduced, principally as a result of deliveries to customers. The customer relationships intangible asset is amortized using the straight-line method over the estimated average useful life of 15 years, with 9 $\frac{3}{4}$ years of scheduled amortization remaining. The aggregate net balance of identifiable intangible assets was \$69.5 million as of December 31, 2019.

The carrying values of the intangible assets are subject to impairment tests whenever events or changes in business circumstances indicate that the carrying amount of the intangible assets may not be fully recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. An impairment loss is measured as the amount by which the carrying amount of a long-lived asset, or asset group exceeds its fair value.

Inherent in our fair value determinations are certain judgments and estimates, including projections of future cash flows, the discount rate reflecting the risk inherent in future cash flows, the interpretation of current economic indicators and market valuations, and strategic plans with regard to operations. A change in these underlying assumptions would cause a change in the results of the tests, which could cause the fair value of the intangible asset to be less than its respective carrying amount.

Pension and Postretirement Health and Life Benefit Costs and Obligations

We provide retirement benefits to certain employees and retirees under defined benefit pension plans and postretirement health and life benefit plans. The valuation of benefit obligations and costs is based on provisions of the plans and actuarial assumptions that involve judgments and estimates.

Assets and obligations related to our retiree benefit plans are remeasured each year as of the balance sheet date resulting in differences between actual and projected results for the year. The Company has elected the accounting option to recognize these actuarial gains and losses in the statement of operations in the fourth quarter. The alternative would be to amortize gains and losses into operating results over time. The Company's treatment of recognizing actuarial gains and losses immediately is intended to increase transparency into how movements in plan assets and benefit obligations impact financial results. Immediate recognition of such gains and losses in the statement of operations may cause significant fluctuations in our results of operations. In addition, an interim remeasurement and recognition of gains or losses may be required for a plan during the year if lump sum payments exceed certain levels.

Effective January 1, 2018, a new accounting standard required components of retirement benefit expense/income other than service cost to be presented below the subtotal for operating income (loss), and are presented in our consolidated statement of operations as *Nonoperating Components of Net Periodic Benefit Expense (Income)*. Service cost continues to be recognized in *Cost of Sales* for the LEU segment and to *Selling, General and Administrative* expense.

We recognized \$4.0 million of net actuarial gains in 2019 compared to net actuarial losses of \$17.3 million in 2018 related to our retiree benefit plans. The net gain in 2019 reflects favorable investment returns relative to the expected return assumption, changes in mortality and healthcare claim assumptions, and favorable claims experience, partially offset by declines in market interest rates. In 2018, the net loss reflects unfavorable investment returns relative to the expected return assumption, partially offset by increases in market interest rates, changes in mortality and healthcare claim assumptions, and favorable claims experience.

Changes in actuarial assumptions could impact the measurement of benefit obligations and benefit costs, as follows:

- The expected return on benefit plan assets is approximately 6.5% for 2020. The expected return is based on historical returns and expectations of future returns for the composition of the plans' equity and debt securities. A one-half percentage point decrease in the expected return on plan assets would increase annual pension costs by \$3.0 million in 2020. However, the net impact of any changes in the expected return on benefit plan assets on the final benefit cost recognized for fiscal year 2020 would be \$0 since the actual return on assets would effectively be reflected at December 31, 2020, under our mark-to-market accounting methodology.
- The present value of pension obligations is calculated by discounting long-term obligations using a market interest rate. This discount rate is the estimated rate at which the benefit obligations could be effectively settled on the measurement date and is based on yields of high quality fixed income investments whose cash flows match the timing and amount of expected benefit payments of the plan. Discount rates of approximately 3.3% were used as of December 31, 2019. A one-half percentage point reduction in the discount rate would increase the valuation of pension benefit obligations by \$39.9 million and postretirement health and life benefit obligations by \$7.7 million, and the resulting changes in the valuations would decrease the service cost and interest cost components of annual pension costs and postretirement health and life benefit costs by \$2.5 million and \$0.5 million, respectively.
- The healthcare costs trend rates are 6.0% projected in 2020 reducing to a final trend rate of 5% by 2022. The healthcare costs trend rate represents our estimate of the annual rate of increase in the gross cost of providing benefits. The trend rate is a reflection of health care inflation assumptions, changes in healthcare utilization and delivery patterns, technological advances, and changes in the health status of our plan participants. A one-percentage point increase in the healthcare cost trend rates would increase postretirement health benefit obligations by about \$3.5 million and would increase the service cost and interest cost components of annual benefit costs by about \$0.1 million.

In December 2012, we invoiced DOE for \$42.8 million, representing its share of pension and postretirement benefits costs related to the transition of Portsmouth site employees to DOE's D&D contractor, as permitted by CAS and based on CAS calculation methodology. DOE has denied our claim. As a result, the Company filed an appeal of the decision in the U.S. Court of Federal Claims in January 2015. There is no assurance we will be successful in our appeal, and we have not recognized income or a receivable due to uncertainty regarding the amounts owed and the timing of collection. The parties are engaged in settlement discussions, and further action on the case is stayed pending the outcome of such discussions. Refer to Part I, Item 3, *Legal Proceedings*, for additional information.

Income Taxes

During the ordinary course of business, there are transactions and calculations for which the ultimate tax determination is uncertain. As a result, we recognize tax liabilities based on estimates of whether additional taxes and interest will be due. To the extent that the final tax outcome of these matters is different than the amounts that were initially recorded, such differences will impact the income tax provision in the period in which such determination is made.

Accounting standards prescribe a minimum recognition threshold that a tax position is required to meet before the related tax benefit may be recognized in the financial statements. As of December 31, 2019, the liability for unrecognized tax benefits, included in *Other Long-Term Liabilities*, was \$0.4 million and accrued interest and penalties totaled less than \$0.1 million.

Accounting for income taxes involves estimates and judgments relating to the tax bases of assets and liabilities and the future recoverability of deferred tax assets. In assessing the realization of deferred tax assets, we determine whether it is more likely than not that the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon generating sufficient taxable income in future years when deferred tax assets are recoverable or are expected to reverse. Factors that may affect estimates of future taxable income include, but are not limited to, competition, changes in revenue, costs or profit margins, market share and developments related to the American Centrifuge technology. In practice, positive and negative evidence is reviewed with objective evidence receiving greater weight. If, based on the weight of available evidence, it is more likely than not that all, or some portion, of the deferred tax assets will not be realized, we record a valuation allowance. The more negative evidence that exists, the more positive evidence is necessary and the more difficult it is to support a conclusion that a valuation allowance is not needed for all, or some portion, of the deferred tax assets. A cumulative loss in recent years is a significant piece of negative evidence and one of the most difficult forms of negative evidence to overcome. We have incurred cumulative operating losses since 2011.

Our inability to overcome the strong negative objective evidence of a cumulative loss in recent years with sufficient objective positive evidence of future taxable income to realize our deferred tax assets required us to record a valuation allowance. To determine the amount of the valuation allowance, all sources of taxable income, including tax planning strategies, were analyzed. We determined that it is more likely than not that our net deferred tax assets will not be realized in the immediate future. A full valuation allowance was first recorded in the fourth quarter of 2011 for the net deferred tax asset created by the expensing of previously capitalized costs related to a number of earlier centrifuge machines used in the demonstration cascade test program, as well as all other previously recorded net deferred tax assets, including state deferred taxes. As of December 31, 2019, the valuation allowance against net deferred taxes was \$459.5 million.

The valuation allowance results in our inability to record tax benefits on future losses until we generate sufficient taxable income to support the elimination of the valuation allowance. However, the valuation allowance will not affect the Company's ability to use its deferred tax assets when it generates taxable income. In connection with the 2014 bankruptcy plan, tax attributes, such as net operating losses ("NOLs"), tax credits, and tax basis in property have been reduced. When tax attributes are reduced, deferred taxes related to the tax attributes and the corresponding valuation allowance are adjusted. Management reassesses the realization of the deferred tax assets each reporting period. As financial results improve and the deferred tax assets become realizable, we will reduce the valuation allowance accordingly.

Results of Operations

Segment Information

The following table presents elements of the accompanying consolidated statements of operations that are categorized by segment (dollar amounts in millions):

	Year Ended December 31,		\$ Change	% Change
	2019	2018		
LEU segment				
Revenue:				
SWU revenue	\$ 123.7	\$ 130.6	\$ (6.9)	(5)%
Uranium revenue	45.7	33.8	11.9	35 %
Total	169.4	164.4	5.0	3 %
Cost of sales	118.6	187.7	69.1	37 %
Gross profit (loss)	\$ 50.8	\$ (23.3)	\$ 74.1	
Technical solutions segment				
Revenue	\$ 40.3	\$ 28.6	\$ 11.7	41 %
Cost of sales	58.6	23.2	(35.4)	(153)%
Gross profit (loss)	\$ (18.3)	\$ 5.4	\$ (23.7)	
Total				
Revenue	\$ 209.7	\$ 193.0	\$ 16.7	9 %
Cost of sales	177.2	210.9	33.7	16 %
Gross profit (loss)	\$ 32.5	\$ (17.9)	\$ 50.4	

Revenue

Revenue from the LEU segment increased \$5.0 million (or 3%) in 2019 compared to 2018. SWU revenue declined \$6.9 million (or 5%) in 2019 compared to 2018. The volume of SWU sales declined 24% and the average SWU price billed to customers increased 24%, reflecting the particular contracts under which SWU were sold during the periods. Uranium revenue increased \$11.9 million (or 35%) in 2019 compared to 2018. The volume of uranium sales increased 29% and the average uranium price billed to customers increased 5%.

Revenue from the technical solutions segment increased \$11.7 million (or 41%) in 2019 compared to 2018, primarily the result of work performed under the HALEU contract and the K-1600 D&D contract, partially offset by a decrease in work performed under the UT-Battelle contract. Revenue in 2018 included \$9.5 million related to the January 2018 settlement with DOE related to past work performed.

Cost of Sales

Cost of sales for the LEU segment declined \$69.1 million (or 37%) in 2019 compared to 2018, primarily reflecting a decline in the average cost of sales per SWU and the changes in SWU and uranium sales volumes. In 2019, the average cost of sales per SWU declined 38%, primarily due to lower pricing under the Russian Supply Agreement. Cost of sales includes legacy costs related to former employees of the Portsmouth and Paducah Gaseous Diffusion Plants of \$4.1 million in 2019 and \$3.4 million in 2018. Valuation adjustments for our uranium inventory to reflect declines in uranium market price indicators totaled \$2.3 million in 2019 and there were no valuation adjustments in 2018. The average uranium unit cost of sales increased 17% in 2019 compared to 2018.

Cost of sales for the technical solutions segment increased \$35.4 million (or 153%) in 2019 compared to 2018, reflecting the mix of technical solutions work performed in each of the periods. As of December 31, 2019, our share of remaining projected program costs under the HALEU Contract was recognized in *Cost of Sales* as an accrued loss of \$18.3 million. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections.

Gross Profit (Loss)

We recognized a gross profit of \$32.5 million in 2019, an increase of \$50.4 million compared to the gross loss of \$17.9 million in 2018.

The gross profit for the LEU segment was \$50.8 million in 2019 compared to a gross loss of \$23.3 million in 2018. The improvement for the LEU segment of \$74.1 million was primarily due to the decline in the average cost of sales per SWU and the increase in the average SWU price billed to customers, partially offset by the decline in SWU volume sold. The gross profit from uranium sales in 2019 was relatively minor, with the impact of the increase in uranium volume sold and the increase in the average unit sales price largely offset by the increase in the average uranium unit cost of sales.

For the technical solutions segment, we recognized a gross loss of \$18.3 million in 2019, compared to gross profit of \$5.4 million in 2018. The gross profit for 2019 was break even excluding the accrued contract loss of \$18.3 million related to projected costs for the HALEU program. In 2018, there was a gross loss of \$4.1 million excluding the \$9.5 million of revenue in the January 2018 settlement with DOE related to past work performed.

Non-Segment Information

The following table presents elements of the accompanying consolidated statements of operations that are not categorized by segment (dollar amounts in millions):

	Year Ended December 31,		\$ Change	% Change
	2019	2018		
Gross profit (loss)	\$ 32.5	(17.9)	\$ 50.4	282 %
Advanced technology costs	14.6	26.1	11.5	44 %
Selling, general and administrative	33.7	39.9	6.2	16 %
Amortization of intangible assets	6.5	6.6	0.1	2 %
Special charges (credits) for workforce reductions and advisory costs	(1.9)	2.2	4.1	186 %
Gain on sales of assets	(0.7)	(0.3)	0.4	133 %
Operating loss	(19.7)	(92.4)	72.7	79 %
Gain on early extinguishment of debt	—	(0.5)	(0.5)	(100)%
Nonoperating components of net periodic benefit expense (income)	(4.3)	10.6	14.9	141 %
Interest expense	3.0	4.1	1.1	27 %
Investment income	(2.2)	(2.5)	(0.3)	(12)%
Loss before income taxes	(16.2)	(104.1)	87.9	84 %
Income tax expense	0.3	—	(0.3)	-
Net loss	(16.5)	(104.1)	87.6	84 %
Preferred stock dividends - undeclared and cumulative	7.8	7.8	—	— %
Net loss allocable to common stockholders	\$ (24.3)	\$ (111.9)	\$ 87.6	78 %

Advanced Technology Costs

Advanced technology costs consist of American Centrifuge and related expenses that are outside of our customer contracts in the technical solutions segment. Costs declined \$11.5 million (or 44%) in 2019 compared to 2018, primarily due to a reduction in our license and facility caretaker costs at Piketon following the commencement of work under the HALEU contract in June 2019.

Selling, General and Administrative

Selling, general and administrative expenses declined \$6.2 million (or 16%) in 2019 compared to 2018. Compensation and benefits declined \$4.0 million, information technology costs declined \$0.8 million, consulting expenses declined \$0.4 million, travel costs declined \$0.4 million in 2019, and other costs declined by a net \$0.6 million.

Amortization of Intangible Assets

Amortization of intangible assets declined \$0.1 million (or 2%) in 2019 compared to 2018. Amortization expense for the intangible asset related to the September 2014 sales order book is a function of SWU sales volume under that order book, and amortization expense for the intangible asset related to customer relationships is amortized on a straight-line basis.

Special Charges (Credits) for Workforce Reductions and Advisory Costs

Special charges declined \$4.1 million (or 186%) in 2019, compared to 2018. Special charges in 2019 included a credit of \$2.9 million for the reversal of accrued termination benefits for employees who were retained with the signing of the HALEU letter agreement in May 2019. Special charges in 2018 consisted of estimated employee termination benefits of \$2.1 million and advisory costs related to updating the Company's information technology systems of \$0.1 million.

Gain on Early Extinguishment of Debt

In 2018, we recognized a gain of \$0.5 million related to the exchange of securities and cash on December 6, 2018 related to the early extinguishment of \$6.3 million of Company's 8% paid-in-kind ("PIK") toggle notes (the "8% PIK Toggle Notes") due in 2019.

Nonoperating Components of Net Periodic Benefit Expense (Income)

Nonoperating components of net periodic benefit expense (income) netted to income of \$4.3 million in 2019, compared to expense of \$10.6 million in 2018. Nonoperating components of net periodic benefit expense (income) consist primarily of the expected return on plan assets, offset by interest cost as the discounted present value of benefit obligations nears payment.

In 2019, the net gain reflects favorable investment returns relative to the expected return assumption, changes in mortality and healthcare claim assumptions, and favorable claims experience, partially offset by declines in market interest rates.

In 2018, major U.S. stock indices posted their largest annual losses since 2008. The net expense in 2018 reflected unfavorable investment returns relative to the expected return assumption, partially offset by increases in market interest rates, changes in mortality and healthcare claim assumptions, and favorable claims experience.

Interest Expense

Interest expense declined \$1.1 million (or 27%) in 2019, compared to 2018, primarily as a result of the repayment the outstanding 8% PIK Toggle Notes that matured on September 30, 2019.

Income Tax Expense (Benefit)

The income tax expense was \$0.3 million in 2019 and the income tax benefit was less than \$0.1 million in 2018. The income tax expense in 2019 primarily relates to an accrual for a current unrecognized tax benefit offset by the reversal of a previously accrued unrecognized tax benefit. The income tax benefit in 2018 primarily relates to a reversal like the one in 2019.

Net Loss

Our net loss was \$16.5 million in 2019, compared to a net loss of \$104.1 million in 2018. The favorable variance of \$87.6 million was primarily a result of a \$50.4 million favorable variance in gross profit, a \$14.9 million favorable variance in nonoperating components of net periodic benefit expense, a \$11.5 million decline in advanced technology costs, a \$6.2 million decline in selling, general and administrative expenses, and a \$4.1 million decline in special charges.

Preferred Stock Dividends - Undeclared and Cumulative

Holders of the Series B Preferred Stock are entitled to cumulative dividends of 7.5% per annum of the liquidation preference at origination of \$104.6 million. We did not meet the criteria for a dividend payment obligation for the years ended December 31, 2019 and 2018 and we have not declared, accrued or paid dividends on the Series B Preferred Stock since issuance on February 14, 2017. Dividends on the Series B Preferred Stock are cumulative to the extent not paid at any quarter-end, whether or not declared and whether or not there are assets of the Company legally available for the payment of such dividends in whole or in part. Refer to *Note 16, Stockholders' Equity*, of the consolidated financial statements.

Liquidity and Capital Resources

We ended 2019 with a consolidated cash balance of \$130.7 million. We anticipate having adequate liquidity to support our business operations for at least the next 12 months from the date of this report. Our view of liquidity is dependent on, among other things, conditions affecting our operations, including market, international trade, COVID-19 and other conditions and the level of expenditures and government funding for our services contracts and the timing of customer payments. Liquidity requirements for our existing operations are affected primarily by the timing and amount of customer sales and our inventory purchases.

We believe our sales order book in our LEU segment is a source of stability for our liquidity position. Our sales order book extends to 2030. Although based on current market conditions, we see limited uncommitted demand for LEU for the next few years before an anticipated rise in uncommitted demand later in the 2020s, we continue to seek and make additional sales, including sales for delivery through the late 2020s.

Cash resources and net sales proceeds from our LEU segment fund technology costs that are outside of our customer contracts in the technical solutions segment and general corporate expenses, including cash interest payments on our debt. We believe our investment in advanced U.S. uranium enrichment technology will position the Company to meet the needs of our customers as they deploy advanced reactors and next generation fuels. We signed the three-year HALEU Contract with DOE in October 2019 to deploy a cascade of centrifuges to demonstrate production of HALEU for advanced reactors. Under the agreement, the Company is contributing a portion of the program costs. The program has been under way since May 31, 2019, when Centrus and DOE signed a preliminary letter agreement that allowed work to begin while the full contract was being finalized.

Under the HALEU Contract, DOE agreed to reimburse the Company for 80% of its costs incurred in performing the contract, up to a maximum of \$115 million. The Company's cost share is the corresponding 20% and any costs incurred above these amounts. As described in *Overview* above, the portion of our anticipated cost share under the HALEU Contract representing our share of remaining projected program costs was recognized in *Cost of Sales* as an accrued loss of \$18.3 million as of December 31, 2019. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections. The HALEU Contract is incrementally funded and DOE is currently obligated for costs up to approximately \$53.2 million of the \$115 million. The Company received cash payments of \$10.7 million through December 31, 2019.

There are no guarantees about whether or when government or commercial demand for HALEU will materialize, and there are a number of technical, regulatory and economic hurdles that must be overcome for these fuels and reactors to come to the market.

We lease facilities and related personal property in Piketon, Ohio from DOE. We previously provided financial assurance in the form of surety bonds to DOE for lease turnover obligations and to the NRC for D&D obligations related to the facility. These surety bonds were fully cash collateralized by us. We completed our obligations and, in 2019, the financial assurance instruments were cancelled and we received the cash collateral totaling \$30.5 million including interest.

In connection with the HALEU program, DOE and Centrus renewed the lease agreement and extended the lease term through May 31, 2022. Any facilities or equipment constructed or installed under contract with DOE will be owned by DOE, may be returned to DOE in an "as is" condition at the end of the lease term, and DOE would be responsible for its decontamination and decommissioning. If we determine the equipment and facilities may benefit Centrus after completion of the HALEU program, we can extend the facility lease and ownership of the equipment will be transferred to us, subject to mutual agreement regarding D&D and other issues.

In the event that funding by the U.S. government for research, development and demonstration of gas centrifuge technology is reduced or discontinued, such actions may have a material adverse impact on our ability to deploy the American Centrifuge technology and on our liquidity.

Capital expenditures of approximately \$2-3 million are anticipated over the next 12 months.

The change in cash, cash equivalents and restricted cash from our consolidated statements of cash flows are as follows on a summarized basis (in millions):

	Year Ended December 31,	
	2019	2018
Cash provided by (used in) operating activities	\$ 11.3	\$ (74.4)
Cash provided by investing activities	0.6	0.4
Cash used in financing activities	(35.0)	(11.1)
Decrease in cash, cash equivalents and restricted cash	<u>\$ (23.1)</u>	<u>\$ (85.1)</u>

Operating Activities

During 2019, net cash provided by operating activities was \$11.3 million. Sources of cash included the \$44.0 million increase in deferred revenue and advances from customers, net of deferred costs and the \$29.3 million reduction in accounts receivable. The net reduction of \$37.9 million in the SWU purchase payables balance, due to the timing of purchase deliveries, was a significant use of cash in the period. Uses of cash also included the \$19.5 million increase in pension and postretirement benefits and the net loss of \$16.5 million.

During 2018, net cash used in operating activities was \$74.4 million. Sources of cash included the monetization of inventory purchased in prior periods, with inventories declining \$61.0 million in 2018. The net reduction of \$33.4 million in the SWU purchase payables balance, due to the timing of purchase deliveries, was a significant use of cash in 2018. Uses of cash also included the net loss of \$104.1 million in 2018, net of non-cash expenses, and the increase in receivables from utility customers of \$15.8 million.

Investing Activities

There were no significant capital expenditures in 2019 and 2018. Sales of unneeded assets and property yielded net proceeds of \$0.7 million and \$0.5 million in 2019 and 2018, respectively.

Financing Activities

In 2019, net cash used for financing included the repayment of \$27.5 million of principal due on maturity of the 8% PIK Toggle Notes.

In 2019 and 2018, payments of \$6.1 million of interest classified as debt related to the 8.25% Notes were classified as a financing activity. Refer to *Note 9, Debt*, of the consolidated financial statements regarding the accounting for the 8.25% Notes.

On December 6, 2018, Centrus entered into Exchange Agreements (the “Exchange Agreements”) with certain holders of the Company’s outstanding 8% PIK Toggle Notes. Under the terms of the Exchange Agreements, the Company exchanged \$6.3 million aggregate principal amount of 8% PIK Toggle Notes for 398,638 shares of Class A Common Stock and approximately \$5.1 million in cash, which includes accrued and unpaid interest on the 8% PIK Toggle Notes. The Company recognized a gain on extinguishment of \$0.5 million, which is net of transaction costs of less than \$0.1 million. Refer to *Note 16, Stockholders’ Equity* for details related to the Common Stock.

Working Capital

The following table summarizes the Company's working capital (in millions):

	December 31,	
	2019	2018
Cash and cash equivalents	\$ 130.7	\$ 123.1
Accounts receivable	21.1	60.2
Inventories, net	58.9	26.7
Deposits for financial assurance	0.2	30.3
Current debt	(6.1)	(32.8)
Deferred revenue, net of deferred costs	(98.9)	(69.6)
Other current assets and liabilities, net	(73.1)	(92.1)
Working capital	\$ 32.8	\$ 45.8

Capital Structure and Financial Resources

On September 30, 2019, the Company repaid the outstanding 8% PIK Toggle Notes that matured on September 30, 2019. The Company paid a total of \$28.5 million, including \$1.0 million in accrued interest. The payment was made in accordance with the terms of the Indenture dated September 30, 2014 (as amended, supplanted, or otherwise modified from time to time) among the Company, the Company's subsidiary, United States Enrichment Corp., as the note guarantor, and Delaware Trust Company, as trustee and collateral agent. The payment constituted full satisfaction and discharge of the Indenture and the Notes.

Interest on the 8.25% Notes is payable semi-annually in arrears as of February 28 and August 31 based on a 360-day year consisting of twelve 30-day months. The 8.25% Notes are guaranteed on a subordinated and limited basis by, and secured by substantially all assets of, Enrichment Corp. The 8.25% Notes mature on February 28, 2027. Additional terms and conditions of the 8.25% Notes are described in *Note 9, Debt*, of the consolidated financial statements.

Holder of the Series B Preferred Stock are entitled to cumulative dividends of 7.5% per annum of the liquidation preference at origination of \$104.6 million. We are obligated to pay cash dividends on our Series B Preferred Stock to the extent dividends are declared by the Board of Directors and certain criteria are met. We have not met these criteria for the periods from issuance through December 31, 2019, and have not declared, accrued or paid dividends on the Series B Preferred Stock as of December 31, 2019. Additional terms and conditions of the Series B Preferred Stock, including the criteria that must be met for the payment of dividends, are described in *Note 16, Stockholders' Equity*, of the consolidated financial statements.

The nuclear industry in general, and the nuclear fuel industry in particular, are in a period of significant change. We are actively considering, and expect to consider from time to time in the future, potential strategic transactions, which at any given time may be in various stages of discussions, diligence or negotiation. If we pursue opportunities that require capital, we believe we would seek to satisfy these needs through a combination of working capital, cash generated from operations or additional debt or equity financing.

We are managing our working capital to seek to improve the long-term value of our LEU and technical solutions businesses and are planning to continue funding the Company's qualified pension plans in the ordinary course because we believe that is in the best interest of all stakeholders. We expect that any other uses of working capital will be undertaken in light of these strategic priorities and will be based on the Company's determination as to the relative strength of its operating performance and prospects, financial position and expected liquidity requirements. In addition, we expect that any such other uses of working capital will be subject to compliance with contractual restrictions to which the Company and its subsidiaries are subject, including the terms and conditions of their debt securities and credit facilities. We continually evaluate alternatives to manage our capital structure, and may opportunistically repurchase, exchange or redeem Company securities from time to time.

Commitments under Long-Term SWU Purchase Agreements

The Company purchases SWU contained in LEU from Russia supplied to us under a long-term agreement, as amended, signed in 2011 with the Russian government owned entity TENEX. Under a 2018 agreement, the Company will purchase SWU contained in LEU from Orano with deliveries starting as early as 2021. Refer to *Note 17, Commitments and Contingencies*, of the consolidated financial statements for additional information.

DOE Technology License

We have a non-exclusive license in DOE inventions that pertain to enriching uranium using gas centrifuge technology. The license agreement with DOE provides for annual royalty payments based on a varying percentage (1% up to 2%) of our annual revenues from sales of the SWU component of LEU produced by us using DOE centrifuge technology. There is a minimum annual royalty payment of \$100,000 and the maximum cumulative royalty over the life of the license is \$100 million. There is currently no commercial enrichment facility producing LEU using DOE centrifuge technology. We are continuing to advance our U.S. centrifuge technology that has evolved from DOE inventions at specialized facilities in Oak Ridge, Tennessee, with a view to deploying a commercial enrichment facility over the long term once market conditions recover.

Off-Balance Sheet Arrangements

Other than outstanding surety bonds, our SWU purchase commitments and the license agreement with DOE relating to the American Centrifuge technology, there were no material off-balance sheet arrangements at December 31, 2019 or December 31, 2018.

New Accounting Standards

Reference is made to *New Accounting Standards in Note 1, Summary of Significant Accounting Policies*, of the consolidated financial statements for information on new accounting standards.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not provided as a smaller reporting company as defined in Rule 12b-2 of the Exchange Act.

Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements, together with related notes and the report of PricewaterhouseCoopers LLP, our independent registered public accounting firm, are set forth in Part IV, Item 15.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures*Evaluation of Disclosure Controls and Procedures*

Centrus maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed by Centrus in reports it files or submits under the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) is recorded, processed, summarized and reported in the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate to allow for timely decisions regarding required disclosures.

As of December 31, 2019, the end of the period covered by this report, our management performed an evaluation, under the supervision and with the participation of the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Company’s disclosure controls and procedures were effective.

Management’s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed by, and under the supervision of the Chief Executive Officer and the Chief Financial Officer and effected by the Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019. This evaluation was based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework* (2013). Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

This annual report does not include an audit report of the Company’s registered public accounting firm regarding internal control over financial reporting. Management’s report was not subject to audit by the Company’s registered public accounting firm pursuant to Securities and Exchange Commission rules that permit the Company to provide only management’s report in this annual report.

Remediation of Previously Identified Material Weakness

As previously disclosed in *Part II, Item 9A, Controls and Procedures* of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, management identified a material weakness in the Company's internal control over financial reporting. Specifically, we did not maintain effective controls over the determination and assessment of accounting impacts for arrangements with customers that could result in modification accounting or other impacts when executed. Because of this material weakness, our Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures and internal control over financial reporting were not effective as of December 31, 2018.

In 2019, management implemented new controls related to the determination and assessment of accounting impacts for arrangements with customers that could result in modification accounting or other impacts when executed. The controls include expanded monthly reviews and additional approvals of these arrangements.

During the quarter ended December 31, 2019, we completed the testing and evaluation of the operating effectiveness of the controls, and concluded that the previously reported material weakness has been remediated as of December 31, 2019.

Changes in Internal Control Over Financial Reporting

Other than the steps taken to work towards the remediation of the material weakness identified above, there were no changes in our internal control over financial reporting during the quarter ended December 31, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding executive officers is included in Part I of this Annual Report. Additional information concerning directors, executive officers and corporate governance appearing under the captions *Proposal 1. Election of Directors, Governance Information, Delinquent Section 16(a) Reports*, and *Board and Committee Membership* in the Company's Proxy Statement for the 2020 annual meeting of stockholders, which will be filed no later than 120 days after December 31, 2019 (the "2020 Proxy Statement"), is incorporated herein by reference.

We have adopted a code of business conduct that applies to our employees, including our principal executive officer, principal financial officer and principal accounting officer, as well as to members of our board of directors. Our code of business conduct provides a brief summary of the standards of conduct that are at the foundation of our business operations. The code of business conduct states that we conduct our business in strict compliance with all applicable laws. Each employee must read the code of business conduct and sign a form stating that he or she has read, understands and agrees to comply with the code of business conduct. A copy of the code of business conduct is available in the Corporate Governance section of our website at www.centrusenergy.com or upon request without charge. We will disclose on the website any amendments to, or waivers from, the code of business conduct that are required to be publicly disclosed.

Item 11. Executive Compensation

Information concerning executive and director compensation appearing under the captions *Executive Compensation* and *Compensation of Directors* in the 2020 Proxy Statement is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information concerning security ownership of certain beneficial owners and management appearing under the caption *Security Ownership of Certain Beneficial Owners and Management* in the 2020 Proxy Statement is incorporated herein by reference.

Information concerning the common stock that may be issued under the 2014 Equity Incentive Plan appearing under the caption *Equity Compensation Plan Information* in the 2020 Proxy Statement is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information concerning certain relationships and related transactions and director independence appearing under the captions *Transactions with Related Persons*, and *Director Independence* in the 2020 Proxy Statement is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Information concerning principal accounting fees and services appearing under the caption *Audit and Non-Audit Fees* in the 2020 Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) *Consolidated Financial Statements*

Reference is made to the consolidated financial statements appearing elsewhere in this Annual Report.

(2) *Financial Statement Schedules*

No financial statement schedules are required to be filed as part of this Annual Report.

(3) *Exhibits*

The exhibits listed on the accompanying Exhibit Index are filed or incorporated by reference as part of this report and such Exhibit Index is incorporated herein by reference. The accompanying Exhibit Index identifies each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report.

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
3.1	<u>Amended and Restated Certificate of Incorporation of Centrus Energy Corp. (incorporated by reference to Exhibit 3.1 of the Company's Registration Statement on Form 8-A, filed with the SEC on September 30, 2014).</u>
3.2	<u>Third Amended and Restated Bylaws of Centrus Energy Corp. (incorporated by reference to Exhibit 3.2 of the Company's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 31, 2017)</u>
3.3	<u>Certificate of the Voting Powers, Designations, Preferences and Relative Participating, Optional and Other Special Rights and Qualifications, Limitations or Restrictions of Series A Participating Cumulative Preferred Stock of Centrus Energy Corp. (filed as Exhibit 3.1 to the Company's Registration Statement on Form 8-A filed with the Securities and Exchange Commission on April 7, 2016).</u>
3.4	<u>Certificate of Designation of Rights, Powers, Preferences, Qualifications, Limitations and Restrictions of Series B Senior Preferred Stock (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017).</u>
4.1	<u>Indenture by and among Centrus Energy Corp., as Issuer, United States Enrichment Corporation, as Note Guarantor and Delaware Trust Company, as Trustee and Collateral Agent, dated as of September 30, 2014 (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed with the SEC on September 30, 2014).</u>
4.2	<u>Supplemental Indenture by and among Centrus Energy Corp., as Issuer, United States Enrichment Corporation, as Note Guarantor and Delaware Trust Company, as Trustee and Collateral Agent (filed as Exhibit 4.5 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 15, 2017).</u>
4.3	<u>Pledge and Security Agreement by and among Delaware Trust Company, as Collateral Agent, and United States Enrichment Corporation, dated as of September 30, 2014 (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K, filed with the SEC on September 30, 2014).</u>
4.4	<u>Note Subordination Agreement by and among United States Enrichment Corporation and Delaware Trust Company, as Trustee, dated as of September 30, 2014 (incorporated by reference to Exhibit 4.3 of the Company's Current Report on Form 8-K, filed with the SEC on September 30, 2014).</u>
4.5	<u>Outstanding Notes Note Subordination Agreement by and among United States Enrichment Corporation and Delaware Trust Company, as Trustee, dated as of February 14, 2017 (incorporated by reference to Exhibit 4.6 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017).</u>
4.6	<u>Rights Agreement dated as of April 6, 2016, among Centrus Energy Corp., Computershare Inc. ("Computershare") and Computershare Trust Company, N.A., together with Computershare, as Rights Agent (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form 8-A filed with the Securities and Exchange Commission on April 7, 2016).</u>
4.7	<u>Form of Rights Certificate (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form 8-A filed with the Securities and Exchange Commission on April 7, 2016).</u>
4.8	<u>Form of First Amendment to Section 382 Rights Agreement by and between Centrus Energy Corp., Computershare Trust Company, N.A. and Computershare Inc., to be dated on or about February 7, 2017 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed with the SEC on January 5, 2017).</u>
4.9	<u>Indenture by and among Centrus Energy Corp., as Issuer, United States Enrichment Corporation, as Note Guarantor and Delaware Trust Company, as Trustee and Collateral Agent, dated as of February 14, 2017 (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017).</u>
4.10	<u>Pledge and Security Agreement, dated as of February 14, 2017 by and among Delaware Trust Company, as Collateral Agent, and United States Enrichment Corporation dated as of February 14, 2017 (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017).</u>

- 4.11 [New Notes Note Subordination Agreement by and among United States Enrichment Corporation and Delaware Trust Company, as Trustee, dated as of February 14, 2017 \(incorporated by reference to Exhibit 4.3 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017\).](#)
- 4.12 [Pari Passu Intercreditor Agreement by and among United States Enrichment Corporation and Delaware Trust Company, as Trustee, dated as of February 14, 2017 \(incorporated by reference to Exhibit 4.4 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017\).](#)
- 4.13 [Second Amendment to Section 382 Rights Agreement by and between Centrus Energy Corp., Computershare Trust Company, N.A. and Computershare Inc., dated April 3, 2019 \(incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed with the SEC on April 4, 2019\).](#)
- 4.14 [Description of the Securities of the Company. \(a\)](#)
- 10.1 [Lease Agreement between the United States Department of Energy \("DOE"\) and United States Enrichment Corporation, dated as of July 1, 1993, including notice of exercise of option to renew \(incorporated by reference to Exhibit 10.1 of the Company's Registration Statement on Form S-1, filed with the SEC on June 29, 1998\).](#)
- 10.2 [Supplemental Agreement No. 1 to the Lease Agreement between DOE and United States Enrichment Corporation, dated as of December 7, 2006 \(incorporated by reference to Exhibit 10.2 of the Company's Annual Report on Form 10-K for the year ended December 31, 2006, filed with the SEC on February 27, 2007\). \(Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\).](#)
- 10.3 [Memorandum of Agreement, dated April 6, 1998, between the Office of Management and Budget and United States Enrichment Corporation relating to post-privatization liabilities \(incorporated by reference to Exhibit 10.18 of the Company's Registration Statement on Form S-1, filed with the SEC on June 29, 1998\).](#)
- 10.4 [Agreement, dated June 17, 2002, between DOE and USEC Inc. \("2002 DOE-USEC Agreement"\) \(incorporated by reference to Exhibit 99.3 of the Company's Current Report on Form 8-K, filed with the SEC on June 21, 2002\).](#)
- 10.5 [Modification 1 to 2002 DOE-USEC Agreement, dated August 20, 2002 \(incorporated by reference to Exhibit 10.15 of the Company's Annual Report on Form 10-K for the year ended December 31, 2005, filed with the SEC on February 24, 2006\).](#)
- 10.6 [Modification No. 2 dated January 12, 2009, to 2002 DOE-USEC Agreement \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on January 13, 2009\).](#)
- 10.7 [Modification No. 3 dated January 28, 2010, to 2002 DOE-USEC Agreement \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on February 2, 2010\).](#)
- 10.8 [Modification No. 4 dated February 11, 2011, to 2002 DOE-USEC Agreement \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on February 16, 2011\).](#)
- 10.9 [Modification No. 5 dated June 12, 2012, to the Agreement dated June 17, 2002, between DOE and USEC Inc. \(incorporated by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, filed with the SEC on August 1, 2012\).](#)
- 10.10 [License dated December 7, 2006 between the United States of America, as represented by DOE, as licensor, and USEC Inc., as licensee \(incorporated by reference to Exhibit 10.34 of the Company's Annual Report on Form 10-K for the year ended December 31, 2006, filed with the SEC on February 27, 2007\).](#)
- 10.11 [Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and Joint Stock Company "Techsnabexport" \("TENEX"\) \(incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, filed with the SEC on May 4, 2011\). \(Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\).](#)
- 10.12 [Amendment No. 001 dated April 22, 2013 to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, filed with the SEC on August 6, 2013\). \(Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\).](#)

- 10.13 [Amendment No. 002 dated July 29, 2013 to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, filed with the SEC on November 5, 2013\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.14 [Amendment No. 003 dated July 23, 2014 to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, filed with the SEC on November 14, 2014\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.15 [Amendment No. 004 dated September 10, 2014 to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.6 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, filed with the SEC on November 14, 2014\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.16 [Letter Agreement, dated June 22, 2015, supplementing the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX. \(incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.17 [Amendment No. 005 dated July 7, 2015, to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed with the SEC on November 12, 2015\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.18 [Amendment No. 006 dated September 4, 2015, to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed with the SEC on November 12, 2015\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.19 [Amendment No. 007 dated October 19, 2015, to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.19 of the Company's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 23, 2016\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.20 [Amendment No. 008 dated December 22, 2015, to the Enriched Product Transitional Supply Contract dated March 23, 2011 between United States Enrichment Corporation and TENEX \(incorporated by reference to Exhibit 10.20 of the Company's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 23, 2016\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.21 [Letter Agreement, dated August 1, 2016, by and between Joint Stock Company "TENEX" and United States Enrichment Corporation \(incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 10, 2016\).](#) (Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2).
- 10.22 [Form of Plan Support Agreement dated December 13, 2013 between USEC Inc. and certain holders of USEC Inc.'s 3.0% convertible senior notes due October 1, 2014, incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on December 16, 2013.](#)
- 10.23 [Plan Support Agreement dated December 13, 2013 between USEC Inc. and certain holders of USEC Inc.'s 3.0% convertible senior notes due October 1, 2014, as amended through February 28, 2014 \(incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed on March 5, 2014\).](#)
- 10.24 [Plan Support Agreement dated March 4, 2014 between USEC Inc. and Toshiba America Nuclear Energy Company \(incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on March 5, 2014\).](#)

- 10.25 [Plan Support Agreement dated March 4, 2014 between USEC Inc. and Babcock & Wilcox Investment Company \(incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed on March 5, 2014\).](#)
- 10.26 [Director and Officer Indemnification Agreement \(incorporated by reference to Exhibit 10.77 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 16, 2015\).](#)
- 10.27 [Form of Change in Control Agreement with executive officers \(incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K, filed with the SEC on January 16, 2013\).](#) (b)
- 10.28 [Employment Agreement, dated March 6, 2015, by and between Centrus Energy Corp. and Daniel B. Poneman \(incorporated by reference to Exhibit 10.7 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 7, 2015\).](#) (b)
- 10.29 [Amended Employment Agreement, dated November 28, 2018, by and between Centrus Energy Corp. and Daniel B. Poneman.](#) (a),(b)
- 10.30 [2016 Executive Incentive Plan \(incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q, filed with the SEC on August 12, 2016\).](#) (b)
- 10.31 [2015 Executive Incentive Plan \(incorporated by reference to Exhibit 10.8 of the Company's Quarterly Report on Form 10-Q, filed with the SEC on May 7, 2015\).](#) (b)
- 1032 [Centrus Energy Corp. 2014 Equity Incentive Plan \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on September 30, 2014\).](#) (b)
- 10.33 [Form of Employee Nonqualified Stock Option Award Agreement under the Centrus Energy Corp. 2014 Equity Incentive Plan \(incorporated by reference to Exhibit 10.80 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 16, 2015\).](#) (b)
- 10.34 [Form of Non-Employee Director Restricted Stock Unit Award Agreement \(Annual Retainers and Meeting Fees\) under the Centrus Energy Corp. 2014 Equity Incentive Plan \(incorporated by reference to Exhibit 10.81 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 16, 2015\).](#) (b)
- 10.35 [Centrus Energy Corp. 2014 Post-Restructuring Incentive Plan \(incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K, filed with the SEC on September 30, 2014\).](#) (b)
- 10.36 [Amended and Restated Centrus Energy Corp. Executive Severance Plan \(incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K, filed with the SEC on September 30, 2014\).](#) (b)
- 10.37 [USEC Inc. Pension Restoration Plan, as amended and restated, dated November 1, 2007 \(incorporated by reference to Exhibit 10.55 of the Company's Annual Report on Form 10-K/A for the year ended December 31, 2007, filed with the SEC on February 29, 2008\).](#) (b)
- 10.38 [First Amendment, dated August 1, 2008, to USEC Inc. Pension Restoration Plan, as amended and restated, dated November 1, 2007 \(incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, filed with the SEC on November 5, 2008\).](#) (b)
- 10.39 [Second Amendment dated July 25, 2013 to the USEC Inc. Pension Restoration Plan, as amended and restated effective January 1, 2008 \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on July 26, 2013\).](#) (b)
- 10.40 [USEC Inc. 1999 Supplemental Executive Retirement Plan, as amended and restated, dated November 1, 2010 \(incorporated by reference to Exhibit 10.65 of the Company's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 24, 2011\).](#) (b)
- 10.41 [USEC Inc. 2006 Supplemental Executive Retirement Plan, as amended and restated, dated November 1, 2007 \(incorporated by reference to Exhibit 10.64 of the Company's Annual Report on Form 10-K/A for the year ended December 31, 2007, filed with the SEC on February 29, 2008\).](#) (b)
- 10.42 [First Amendment dated October 28, 2009 to the USEC Inc. 2006 Supplemental Executive Retirement Plan, as amended and restated \(incorporated by reference to Exhibit 10.71 of the Company's Annual Report on Form 10-K for the year ended December 31, 2009, filed with the SEC on March 1, 2010\).](#) (b)
- 10.43 [Centrus Energy Corp. Executive Deferred Compensation Plan, as amended and restated \(incorporated by reference to Exhibit 10.5 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed with the SEC on August 7, 2015\).](#) (b)

- 10.44 [Form of Support Agreement \(including the Term Sheet\) between Centrus Energy Corp. and the Support Parties, dated January 5, 2017 \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on January 5, 2017\).](#)
- 10.45 [Agreement between Centrus Energy Corp. and UT-Battelle, LLC dated October 1, 2017 \(incorporated by reference to Exhibit 10.44 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 15, 2018\).](#)
- 10.46 [Settlement Agreement between United States Enrichment Corporation and the United States, dated January 11, 2018 \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on January 17, 2018\).](#)
- 10.47 [Services Agreement to Provide Technical and Resource Support - effective March 26, 2018, by and between Centrus Energy Corp., American Centrifuge Operating, LLC and X-Energy, LLC \(incorporated by reference to Exhibit 10.46 of the Company's Quarterly Report on Form 10-Q, for the quarter ended March 31, 2018, filed with the SEC on May 10, 2018\). \(Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\).](#)
- 10.48 [Purchase and Sale Agreement dated April 27, 2018 between Orano Cycle and United States Enrichment Corporation \(incorporated by reference to Exhibit 10.47 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed with the SEC on August 9, 2018\). \(Certain information has been omitted and filed separately, pursuant to confidential treatment under Rule 24b-2\).](#)
- 10.49 [Centrus Energy Corp. 2014 Equity Incentive Plan \(as amended and restated in May 2017\) \(incorporated by reference to Exhibit 10.48 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the SEC on November 8, 2018\). \(b\)](#)
- 10.50 [Work Authorization dated September 27, 2018 under the Supply of Service Agreement Between United States Department of Energy and Centrus Energy Corp., Exhibit J to the Centrifuge Deployment Project Lease Agreement between the Department of Energy and USEC Inc. \(incorporated by reference to Exhibit 10.49 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the SEC on November 8, 2018\).](#)
- 10.51 [Form of Exchange Agreement, dated December 6, 2018, by and among Centrus Energy Corp. and certain noteholders \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on December 6, 2018\).](#)
- 10.52 [Services Agreement to Provide Technical and Resource Support, dated November 29, 2018, by and between American Centrifuge Operating, LLC and X Energy, LLC \(Certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\) \(incorporated by reference to Exhibit 10.52 of the Company's Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on April 1, 2019\).](#)
- 10.53 [Letter Agreement dated May 31, 2019 between Centrus Energy Corp. and the U.S. Department of Energy \(certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\) \(incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed with the SEC on August 12, 2019\).](#)
- 10.54 [Amendment to Appendix 1 Lease Agreement between the U.S. Department of Energy and United States Enrichment Corporation for the Gas Centrifuge Enrichment Plant, dated as of May 31, 2019 \(certain information has been omitted and filed separately pursuant to confidential treatment under Rule 24b-2\) \(incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed with the SEC on August 12, 2019\).](#)
- 10.55 [Letter Agreement, dated September 23, 2019, by and between Joint Stock Company "TENEX" and United States Enrichment Corporation \(certain information has been omitted because the identified confidential portions \(i\) are not material and \(ii\) would be competitively harmful if publicly disclosed\) \(incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, filed with the SEC on November 8, 2019\).](#)
- 10.56 [Amendment No. 009, dated September 23, 2019, to the Enriched Product Transitional Supply Contract dated March 23, 2011, between United States Enrichment Corporation and TENEX \(certain information has been omitted because the identified confidential portions \(i\) are not material and \(ii\) would be competitively harmful if publicly disclosed\) \(incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, filed with the SEC on November 8, 2019\).](#)

- 10.57 [Letter Agreement, dated June 12, 2018, by and between Joint Stock Company “TENEX” and United States Enrichment Corporation \(certain information has been omitted because the identified confidential portions \(i\) are not material and \(ii\) would be competitively harmful if publicly disclosed\) \(incorporated by reference to Exhibit 10.3 to the Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, filed with the SEC on November 8, 2019\).](#)
- 10.58 [Letter Agreement, dated September 28, 2019, by and between Joint Stock Company “TENEX” and United States Enrichment Corporation \(certain information has been omitted because the identified confidential portions \(i\) are not material and \(ii\) would be competitively harmful if publicly disclosed\) \(incorporated by reference to Exhibit 10.4 to the Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed with the SEC on November 8, 2019\).](#)
- 10.59 [Agreement, dated October 31, 2019, by and between American Centrifuge Operating, LLC and the United States Department of Energy.](#) (a)
- 10.60 [2019 Executive Incentive Plan.](#) (a) (b)
- 10.61 [Separation Agreement dated October 10, 2019 between the Company and Marian K. Davis.](#) (a) (b)
- 10.62 [Consulting Agreement dated January 2, 2020 between the Company and Stephen S. Greene \(certain personally identifiable information has been omitted\).](#) (a) (b)
- 21 [Subsidiaries of Centrus Energy Corp.](#) (a)
- 23.1 [Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.](#) (a)
- 31.1 [Certification of the Chief Executive Officer pursuant to Rule 13a-14\(a\)/15d-14\(a\).](#) (a)
- 31.2 [Certification of the Chief Financial Officer pursuant to Rule 13a-14\(a\)/15d-14\(a\).](#) (a)
- 32.1 [Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350.](#) (a)
- 101 Consolidated financial statements from the Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed in interactive data file (XBRL) format. (a)

(a) Filed herewith.

(b) Management contracts and compensatory plans and arrangements required to be filed as exhibits pursuant to Item 15(b) of this report.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Centrus Energy Corp.

March 26, 2020

/s/ Daniel B. Poneman

Daniel B. Poneman

President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on March 26, 2020:

Signature

Title

/s/ Daniel B. Poneman

Daniel B. Poneman

President and Chief Executive Officer
(Principal Executive Officer) and Director

/s/ Philip O. Strawbridge

Philip O. Strawbridge

Senior Vice President, Chief Financial Officer, Chief Administrative Officer and
Treasurer (Principal Financial Officer)

/s/ John C. Dorrian

John C. Dorrian

Controller and Chief Accounting Officer
(Principal Accounting Officer)

/s/ Mikel H. Williams

Mikel H. Williams

Chairman of the Board and Director

/s/ Michael Diament

Michael Diament

Director

/s/ Tetsuo Iguchi

Tetsuo Iguchi

Director

/s/ W. Thomas Jagodinski

W. Thomas Jagodinski

Director

/s/ Patricia J. Jamieson

Patricia J. Jamieson

Director

/s/ William J. Madia

William J. Madia

Director

/s/ Neil S. Subin

Neil S. Subin

Director

CENTRUS ENERGY CORP.
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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Centrus Energy Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Centrus Energy Corp. and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive income (loss), of stockholders’ deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland
March 26, 2020

We have served as the Company’s auditor since 2002.

CENTRUS ENERGY CORP.
CONSOLIDATED BALANCE SHEETS
(in millions, except share and per share data)

	December 31,	
	2019	2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 130.7	\$ 123.1
Accounts receivable	21.1	60.2
Inventories	64.5	129.7
Deferred costs associated with deferred revenue	144.1	134.9
Deposits for financial assurance	0.2	30.3
Other current assets	9.0	6.3
Total current assets	369.6	484.5
Property, plant and equipment, net	3.7	4.2
Deposits for financial assurance	5.7	6.3
Intangible assets, net	69.5	76.0
Other long-term assets	7.4	0.7
Total assets	\$ 455.9	\$ 571.7
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 50.7	\$ 52.4
Payables under SWU purchase agreements	8.1	46.0
Inventories owed to customers and suppliers	5.6	103.0
Deferred revenue and advances from customers	266.3	204.5
Current debt	6.1	32.8
Total current liabilities	336.8	438.7
Long-term debt	114.1	120.2
Postretirement health and life benefit obligations	138.6	136.2
Pension benefit liabilities	141.8	168.9
Advances from customers	29.4	15.0
Other long-term liabilities	32.1	14.6
Total liabilities	792.8	893.6
Commitments and contingencies (Note 17)		
Stockholders' deficit:		
Preferred stock, par value \$1.00 per share, 20,000,000 shares authorized		
Series A Participating Cumulative Preferred Stock, none issued	—	—
Series B Senior Preferred Stock, 7.5% cumulative, 104,574 shares issued and outstanding and an aggregate liquidation preference of \$127.2 as of December 31, 2019 and \$119.3 as of December 31, 2018	4.6	4.6
Class A Common Stock, par value \$0.10 per share, 70,000,000 shares authorized, 8,347,427 and 8,031,307 shares issued and outstanding as of December 31, 2019 and December 31, 2018, respectively	0.8	0.8
Class B Common Stock, par value \$0.10 per share, 30,000,000 shares authorized, 1,117,462 and 1,406,082 shares issued and outstanding as of December 31, 2019 and December 31, 2018, respectively	0.1	0.1
Excess of capital over par value	61.5	61.2
Accumulated deficit	(405.0)	(388.5)
Accumulated other comprehensive income, net of tax	1.1	(0.1)
Total stockholders' deficit	(336.9)	(321.9)
Total liabilities and stockholders' deficit	\$ 455.9	\$ 571.7

The accompanying notes are an integral part of these consolidated financial statements.

CENTRUS ENERGY CORP.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
(in millions, except share and per share data)

	Year Ended December 31,	
	2019	2018
Revenue:		
Separative work units	\$ 123.7	\$ 130.6
Uranium	45.7	33.8
Technical solutions	40.3	28.6
Total revenue	209.7	193.0
Cost of Sales:		
Separative work units and uranium	118.6	187.7
Technical solutions	58.6	23.2
Total cost of sales	177.2	210.9
Gross profit (loss)	32.5	(17.9)
Advanced technology costs	14.6	26.1
Selling, general and administrative	33.7	39.9
Amortization of intangible assets	6.5	6.6
Special charges (credits) for workforce reductions and advisory costs	(1.9)	2.2
Gain on sales of assets	(0.7)	(0.3)
Operating loss	(19.7)	(92.4)
Gain on early extinguishment of debt	—	(0.5)
Nonoperating components of net periodic benefit expense (income)	(4.3)	10.6
Interest expense	3.0	4.1
Investment income	(2.2)	(2.5)
Loss before income taxes	(16.2)	(104.1)
Income tax expense	0.3	—
Net loss and comprehensive loss	(16.5)	(104.1)
Preferred stock dividends - undeclared and cumulative	7.8	7.8
Net loss allocable to common stockholders	\$ (24.3)	\$ (111.9)
Net loss per common share - basic and diluted	\$ (2.54)	\$ (12.23)
Average number of common shares outstanding - basic and diluted (in thousands)	9,566	9,151

The accompanying notes are an integral part of these consolidated financial statements.

CENTRUS ENERGY CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year Ended December 31,	
	2019	2018
OPERATING		
Net loss	\$ (16.5)	\$ (104.1)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	7.0	7.4
Accrued loss on long-term contract	18.3	—
Immediate recognition of retirement benefit plans (gains) losses, net	(4.0)	17.3
PIK interest on paid-in-kind toggle notes	1.1	1.7
Gain on early extinguishment of debt	—	(0.5)
Gain on sales of assets	(0.7)	(0.4)
Inventory valuation adjustments	2.3	—
Changes in operating assets and liabilities:		
Accounts receivable	29.3	9.7
Inventories, net	0.1	61.0
Payables under SWU purchase agreements	(37.9)	(33.4)
Deferred revenue and advances from customers, net of deferred costs	44.0	0.1
Accounts payable and other liabilities	(12.3)	3.7
Pension and postretirement liabilities	(19.5)	(28.0)
Other, net	0.1	(8.9)
Cash provided by (used in) operating activities	<u>11.3</u>	<u>(74.4)</u>
INVESTING		
Capital expenditures	(0.1)	(0.1)
Proceeds from sales of assets	0.7	0.5
Cash provided by investing activities	<u>0.6</u>	<u>0.4</u>
FINANCING		
Principal payments on debt	(27.5)	(5.0)
Payments for deferred financing costs	(1.4)	—
Payment of interest classified as debt	(6.1)	(6.1)
Cash used in financing activities	<u>(35.0)</u>	<u>(11.1)</u>
Decrease in cash, cash equivalents and restricted cash	(23.1)	(85.1)
Cash, cash equivalents and restricted cash, beginning of period (Note 4)	159.7	244.8
Cash, cash equivalents and restricted cash, end of period (Note 4)	<u>\$ 136.6</u>	<u>\$ 159.7</u>
Supplemental cash flow information:		
Interest paid in cash	\$ 1.5	\$ 7.1
Non-cash activities:		
Conversion of interest payable-in-kind to debt	\$ 0.7	\$ 1.7
Deferred financing costs included in accounts payable and accrued liabilities	\$ 0.8	\$ —
Additional right of use operating lease assets recorded	\$ 5.2	\$ —
Disposal of right of use operating lease assets for early termination	\$ 0.4	\$ —
Exchange of debt for Class A common stock	\$ —	\$ 0.9

The accompanying notes are an integral part of these consolidated financial statements.

CENTRUS ENERGY CORP.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT
(in millions, except per share data)

	Preferred Stock, Series B	Common Stock, Class A, Par Value \$.10 per Share	Common Stock, Class B, Par Value \$.10 per Share	Excess of Capital Over Par Value	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balance at December 31, 2017	\$ 4.6	\$ 0.8	\$ 0.1	\$ 60.0	\$ (284.5)	\$ 0.1	\$ (218.9)
Adoption of ASC 606 as of January 1, 2018 (Note 1)	—	—	—	—	0.1	—	0.1
Net loss	—	—	—	—	(104.1)	—	(104.1)
Issuance of common stock	—	—	—	0.8	—	—	0.8
Other comprehensive loss, net of tax benefit	—	—	—	—	—	(0.2)	(0.2)
Issuance and amortization of restricted stock units and stock options	—	—	—	0.4	—	—	0.4
Balance at December 31, 2018	\$ 4.6	\$ 0.8	\$ 0.1	\$ 61.2	\$ (388.5)	\$ (0.1)	\$ (321.9)
Net loss	—	—	—	—	(16.5)	—	(16.5)
Other comprehensive income, net of tax expense	—	—	—	—	—	1.2	1.2
Issuance and amortization of restricted stock units and stock options	—	—	—	0.3	—	—	0.3
Balance at December 31, 2019	\$ 4.6	\$ 0.8	\$ 0.1	\$ 61.5	\$ (405.0)	\$ 1.1	\$ (336.9)

The accompanying notes are an integral part of these consolidated financial statements.

CENTRUS ENERGY CORP.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation

The consolidated financial statements of Centrus Energy Corp. (“Centrus” or the “Company”), which include the accounts of the Company, its principal subsidiary United States Enrichment Corporation (“Enrichment Corp.”) and its other subsidiaries, were prepared in conformity with generally accepted accounting principles in the U.S. (“U.S. GAAP”). Certain prior year amounts have been reclassified for consistency with the current year presentation. All material intercompany transactions have been eliminated.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts presented and disclosed in the consolidated financial statements. Significant estimates and judgments include, but are not limited to, revenue and related costs, asset valuations, pension and postretirement health and life benefit costs and obligations, the tax bases of assets and liabilities, the future recoverability of deferred tax assets, and determination of the valuation allowance for deferred tax assets. Actual results may differ from such estimates, and estimates may change if the underlying conditions or assumptions change.

Cash and Cash Equivalents

Cash and cash equivalents include short-term or highly liquid assets with original maturities of three months or less.

Inventories and Inventories Owed to Customers and Suppliers

Low-enriched uranium (“LEU”) consists of two components: separative work units (“SWU”) and uranium. SWU is a standard unit of measurement that represents the effort required to transform a given amount of natural uranium into two components: enriched uranium having a higher percentage of U²³⁵ and depleted uranium having a lower percentage of U²³⁵. The SWU contained in LEU is calculated using an industry standard formula based on the physics of enrichment. The amount of enrichment deemed to be contained in LEU under this formula is commonly referred to as its SWU component and the quantity of natural uranium deemed to be used in the production of LEU under this formula is referred to as its uranium or “feed” component.

SWU and uranium inventory costs are determined using the average cost method. SWU and uranium purchase costs include shipping costs when applicable. Inventories of SWU and uranium are valued at the lower of cost or net realizable value (“NRV”). NRV is the estimated selling price in the ordinary course of business less reasonably predictable costs of completion, disposal, and transportation. The estimated selling price for SWU and uranium is based on the pricing terms of contracts in the Company’s sales order book, and, for uranium not under contract, the estimated selling price is based primarily on published price indicators at the balance sheet date.

Inventories owed to customers and suppliers, included in current liabilities, consist primarily of SWU and uranium inventories owed to fabricators. Fabricators process LEU into fuel for use in nuclear reactors. Under inventory optimization arrangements between Centrus and domestic fabricators, fabricators order quantities of LEU from Centrus based on scheduled or anticipated orders from utility customers for deliveries in future periods. As delivery obligations under actual customer orders arise, Centrus satisfies these obligations by arranging for the transfer to the customer of title to the specified quantity of LEU at the fabricator. Centrus’ balances of SWU and uranium vary over time based on the timing and size of the fabricator’s LEU orders from Centrus and the fabricator’s needs for working stock of LEU. Balances can be positive or negative at the discretion of the fabricator. Fabricators have other inventory supplies and, where a fabricator has elected to order less material from Centrus

than Centrus is required to deliver to its customers at the fabricator, the fabricator will use these other inventories to satisfy Centrus' customer order obligations on Centrus' behalf. In such cases, the transfer of title of LEU from Centrus to the customer results in quantities of SWU and uranium being owed by Centrus to the fabricator. The amounts of SWU and uranium owed to fabricators are satisfied as future deliveries of LEU to fabricators are made.

Deferred Taxes

Centrus follows the asset and liability approach to account for deferred taxes. Deferred tax assets and liabilities are recognized for the anticipated future tax consequences of temporary differences between the balance sheet carrying amounts of assets and liabilities and their respective tax bases. Deferred taxes are based on income tax rates in effect for the years in which temporary differences are expected to reverse. The effect on deferred taxes of a change in income tax rates is recognized in income when the change in rates is enacted in the law. A valuation allowance is provided if it is more likely than not that all, or some portion, of the deferred tax assets may not be realized.

Property, Plant and Equipment

Property, plant and equipment are recorded at acquisition cost. Leasehold improvements and machinery and equipment are depreciated on a straight-line basis over the shorter of the useful life of the assets or the lease term, if applicable. Refer also to *Carrying Value of Long-Lived Assets* below.

Intangible Assets

Centrus has intangible assets resulting from fresh start accounting as a result of emergence from Chapter 11 bankruptcy on September 30, 2014. The identifiable intangible assets relate to the sales order book and customer relationships. The order book intangible asset is amortized as the order book valued at emergence is reduced, principally as a result of deliveries to customers. The customer relationships intangible asset is amortized using the straight-line method over the estimated average useful life of 15 years. Refer also to *Carrying Value of Long-Lived Assets* below.

Carrying Value of Long-Lived Assets

The Company evaluates the carrying values of property, plant and equipment and identifiable intangible assets when events or changes in business circumstances indicate that the carrying amount of asset, or asset group, may not be fully recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. An impairment loss is measured as the amount by which the carrying amount of a long-lived asset, or asset group exceeds its fair value.

Financial Instruments and Fair Value Measurement

Accounting standards define fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, consideration is given to the principal or most advantageous market and assumptions that market participants would use when pricing the asset or liability.

Pursuant to accounting standards, Centrus' 8.25% notes (the "8.25% Notes") and its former 8.0% paid-in-kind ("PIK") toggle notes (the "8% PIK Toggle Notes") are recorded at face value and the fair value is disclosed. The estimated fair value of each of the 8% PIK Toggle Notes and the 8.25% Notes is based on recent trading prices and bid/ask quotes as of or near the balance sheet date. Debt issuance costs are deferred and amortized over the life of the instrument.

The balance sheet carrying amounts for accounts receivable, accounts payable and accrued liabilities, and payables under SWU purchase agreements approximate fair value because of the short-term nature of the instruments.

Concentrations of Credit Risk

Credit risk could result from the possibility of a customer failing to perform or pay according to the terms of a contract. Extension of credit is based on an evaluation of each customer's financial condition. Centrus regularly monitors credit risk exposure and takes steps intended to mitigate the likelihood of such exposure resulting in a loss.

Segments

Centrus operates two business segments: LEU, which supplies various components of nuclear fuel to utilities, and technical solutions, which provides advanced engineering, design, and manufacturing services to government and private sector customers. The technical solutions segment was formerly the Company's contract services segment. The segment was renamed the technical solutions segment on December 31, 2019, to better reflect the nature of work performed and is consistent with the Company's marketing of service offerings as Centrus Technical Solutions. There was no change to the composition of the segment as a result of the re-naming.

Revenue

On January 1, 2018, the Company adopted Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers*, using the modified retrospective method as applied to customer contracts that were not completed as of the adoption date. As a result, financial information for reporting periods beginning on or after January 1, 2018, are presented under ASC 606. There was no material impact of adopting ASC 606 for sales under the LEU segment. For sales under the technical solutions segment, revenue is now primarily recognized over time as control is transferred to the customer.

The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. Revenue for product and service sales is recognized when or as the Company transfers control of the promised products or services to the customer. Revenue is measured at the transaction price, which is based on the amount of consideration that the Company expects to receive in exchange for transferring the promised goods or services to the customer. The transaction price will include estimates of variable consideration until it is probable that a significant reversal of revenue recognized will not occur.

SWU and Uranium Revenue

Revenue for the Company's LEU segment is derived from sales of the SWU component of LEU, from sales of both the SWU and uranium components of LEU, and from sales of uranium. Contracts with customers are primarily long-term, fixed-commitment contracts under which its customers are obligated to purchase a specified quantity of the SWU component of LEU or the SWU and uranium components of LEU. The Company's contracts for natural uranium are generally shorter-term, fixed-commitment contracts.

Revenue is recognized at the time the customer obtains control of the LEU or uranium. Customers generally obtain control of LEU at nuclear fuel fabricators. Centrus ships LEU to nuclear fuel fabricators for scheduled or anticipated orders from utility customers. Based on customer orders, Centrus arranges for the transfer of title of LEU from Centrus to the customer for the specified quantity of LEU at the fuel fabricator. Each such delivery to a customer is accounted for as a distinct performance obligation under a contract, and a contract may call for multiple deliveries over a number of periods. The contract's transaction price is allocated to each performance obligation based on the observable standalone selling price of each distinct delivery of SWU or uranium.

Utility customers in general have the option to defer receipt of uranium products purchased from the Company beyond the contractual sale period. In such cases, title to SWU and/or uranium components are transferred to the customer and a performance obligation for Centrus is created and a receivable is recorded. Cash is collected for the receivable under normal credit terms. The performance obligation is represented as *Deferred Revenue* on the consolidated balance sheet and the customer-titled product is classified as *Deferred Costs Associated with Deferred Revenue* on the consolidated balance sheet. Risk of loss remains with Centrus until the customer obtains control of the uranium product. The recognition of revenue and related cost of sales occurs at the point in time at which the customer obtains control of SWU or uranium and risk of loss of the product transfers to the customer, which may occur beyond one year. The timing of the transfer of control, subject to notice period requirements, is at the option of the customer. As such, deferred costs and deferred revenue are classified within current assets and current liabilities, respectively.

On occasion, the Company will accept payment in the form of uranium. Revenue from the sale of SWU under such contracts is recognized at the time transfer of control of LEU occurs and is based on the fair value of the uranium at contract inception or as the quantity of uranium is finalized, if variable. The Company may also borrow SWU from customers, in which case the Company will record the SWU and the related liability for the borrowing using a projected average purchase price over the borrowing period.

Amounts billed to customers for handling costs are included in sales. Handling costs are accounted for as a fulfillment cost and are included in cost of sales. The Company does not have shipping costs associated with outbound freight after control over a product has transferred to a customer. The Company's contracts with customers do not provide for significant payment terms or financing components.

Technical Solutions Revenue

Revenue for the technical solutions segment, principally representing technical, manufacturing, engineering, procurement, construction and operations services offered to public and private sector customers, is recognized over the contractual period as services are rendered. The Company recognizes revenue over time as it performs on these contracts because of the continuous transfer of control to the customer. For public sector contracts, this continuous transfer of control to the customer is supported by clauses in the contract that allow the customer to unilaterally terminate the contract for convenience, pay the Company for costs incurred plus a reasonable profit and assume control of any work in progress. The Company's private sector contracts generally contain contractual termination clauses or entitle the Company to payments for work performed to date for goods and services that do not have an alternative use. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. A contract may contain one or more performance obligations. Two or more promises to transfer goods or services to a customer may be considered a single performance obligation if the goods or services are highly interdependent or highly interrelated such that utility of the promised goods or services to the customer includes integration services provided by the Company.

The Company determines the transaction price for each contract based on the consideration it expects to receive for the products or services being provided under the contract. If transaction prices are not stated in the contract for each performance obligation, contractual prices are allocated to performance obligations based on estimated relative standalone selling prices of the promised services.

The Company generally uses the cost-to-cost input method of progress for performance obligations to deliver products with continual transfer of control to the customer, because it best depicts the transfer of control to the customer that occurs as the Company incurs costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of direct costs incurred to date to the total estimated direct costs at completion of the performance obligation. Revenues are recorded proportionally as costs are incurred. For performance obligations to provide services to the customer, revenue is recognized over time based on direct costs incurred or the right to invoice method (in situations where the value transferred matches the Company's billing rights) as the customer receives and consumes the benefits.

Under the cost-to-cost method, the Company is required to make reasonably dependable estimates to calculate revenue and costs associated with the design, manufacture and delivery of products and services. Significant judgment is used to estimate total revenue and costs at completion. As a significant change in one or more estimates could affect the profitability of the Company's contracts, the Company reviews and updates its contract-related estimates regularly. Adjustments in estimated profits/losses are recognized under the cumulative catch-up method. Under this method, the impact of the adjustments is recognized in the period the adjustment is recognized. When estimates of total costs to be incurred exceed total estimates of revenue to be earned on a performance obligation related to complex equipment or related services, a provision for the entire loss on the performance obligation is recognized in the period the loss is identified.

The Company has applied the practical expedient in paragraph ASC 606-10-50-14 and does not provide the value of remaining performance obligations under service contracts having original expected terms of one year or less.

The timing of revenue recognition may differ from the timing of invoicing to customers. Progress on satisfying performance obligations under contracts with customers and the related billings and cash collections are recorded on the consolidated balance sheet as contract assets or contract liabilities. Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

Unbilled receivables are included in *Accounts Receivable* on the consolidated balance sheet and arise when the timing of cash collected from customers differs from the timing of revenue recognition, such as when contract provisions require specific milestones to be met before a customer can be billed. Those assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. To the extent billings to the customer precede the recognition of technical solutions revenue, the Company recognizes a liability included in *Deferred Revenue and Advances from Customers* on the consolidated balance sheet.

Advanced Technology Costs

American Centrifuge and related expenses that are outside of our customer contracts are included in *Advanced Technology Costs*, including caretaker costs at the Piketon facility prior to the commencement of work under the HALEU contract in June 2019.

Pension and Postretirement Health and Life Benefit Plans

The Company provides retirement benefits to certain employees and retirees under defined benefit pension plans and postretirement health and life benefit plans. The valuation of benefit obligations and costs is based on provisions of the plans and actuarial assumptions that involve judgments and estimates. Plan assets and benefit obligations are remeasured each year as of the balance sheet date, or when lump sum payments exceed certain levels, resulting in differences between actual and projected results. The Company has elected to recognize these actuarial gains and losses immediately in the statement of operations to provide transparency regarding the impacts of changes in plan assets and benefit obligations.

Stock-Based Compensation

Centrus has a stock-based compensation plan which authorizes the issuance of common stock to the Company's employees, officers, directors and other individuals providing services to the Company or its affiliates pursuant to options, stock appreciation rights, restricted stock units, restricted stock, performance awards, dividend equivalent rights and other stock based awards. Stock-based compensation cost is measured at the grant date based on the fair value of the award. The cost is recognized over the requisite service period on a straight-line basis over the vesting period.

New Accounting Standards

Recently Adopted Accounting Standards

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-02, *Leases (Topic 842)* (“Topic 842”), which requires lessees to recognize a right-of-use asset and lease liability on the balance sheet for all leases with a term longer than 12 months. The Company adopted this standard on January 1, 2019, using the modified transition method which provides for recognition of existing leases as of the adoption date without requiring comparable presentation for the prior period. Lease assets and liabilities are recognized based on the present value of lease payments over the lease term. The Company’s leases do not provide an implicit interest rate. The Company uses an estimated incremental borrowing rate based on the term of the lease using information available at the adoption date or the lease commencement, if later, including the yield on the Company’s collateralized debt. The Company has elected to adopt the package of practical expedients provided under Topic 842, which allowed the Company to not apply a reassessment of whether any existing or expired contracts contain leases, reassessment of lease classification for existing or expired leases and reassessment of initial direct costs for leases. The adoption of this standard had no impact on the Company’s consolidated statement of operations or statement of cash flows. Refer to *Note 10, Leases*, for additional information.

In February 2018, the FASB issued ASU 2018-02, *Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. The amendments in ASU 2018-02 allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cut and Jobs Act of 2017 (the “Tax Act”). However, because the amendments only relate to the reclassification of the income tax effects of the Tax Act, the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. The Company adopted the new standard effective January 1, 2019, and elected not to reclassify the stranded tax effect resulting from the 2017 Tax Act to retained earnings.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, that is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. The Company has elected early adoption of ASU 2019-12. Early adoption on a prospective basis as of January 1, 2019 allows the Company to not be required to apply the exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items. As a result, the tax effect of pre-tax income or loss from continuing operations should be determined without considering the tax effects of items that are not included in continuing operations. Based on the Company’s assessment, no other provisions of ASU 2019-12 impact the Company’s consolidated financial statements for the period of adoption.

Accounting Standards Effective in Future Periods

In August 2018, the FASB issued ASU 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20)*, which modifies the disclosure requirements for employers that sponsor defined benefit pension plans and other postretirement plans. ASU 2018-14 is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The standard is to be applied on a retrospective basis to all periods presented and early adoption is permitted. The Company is evaluating the effect that the provisions of ASU 2018-14 will have on its consolidated financial statements.

2. REVENUE AND CONTRACTS WITH CUSTOMERS

Disaggregation of Revenue

The following table presents revenue from SWU and uranium sales disaggregated by geographical region, including foreign countries representing 10% or more of revenue, based on the billing addresses of customers (in millions):

	Year Ended December 31,	
	2019	2018
United States	\$ 112.1	\$ 112.7
Foreign:		
Japan	23.4	*
Belgium	21.5	35.2
Other	12.4	16.5
Total foreign	57.3	51.7
Revenue - SWU and uranium	<u>\$ 169.4</u>	<u>\$ 164.4</u>

* less than 10%

Refer to *Note 19, Revenue by Geographic Area, Major Customers and Segment Information* for disaggregation of revenue by segment. Disaggregation by end-market is provided in Note 19 and the consolidated statements of operations. SWU and uranium sales are made primarily to electric utility customers. Technical solutions revenue resulted primarily from services provided to the U.S. government and its contractors. SWU and uranium revenue is recognized at point of sale and technical solutions revenue is generally recognized over time.

Accounts Receivable

	December 31,	
	2019	2018
	(\$ millions)	
Accounts receivable:		
Billed	\$ 13.2	\$ 50.4
Unbilled *	7.9	—
Uranium feed receivable	—	9.8
Accounts receivable	<u>\$ 21.1</u>	<u>\$ 60.2</u>

* Billings under certain contracts in the technical services segment are invoiced based on approved provisional billing rates. Unbilled revenue represents difference between actual costs incurred and invoiced amounts. The Company expects to invoice and collect the unbilled amounts after actual rates are submitted to the customer and approved. Unbilled revenue also includes unconditional rights to revenue that is not yet billable under applicable contracts pending the compilation of supporting documentation.

Contract Liabilities

The following table presents changes in contract liability balances (in millions):

	December 31,		Change
	2019	2018	
Accrued loss on HALEU Contract:			
Current - <i>Accounts payable and accrued liabilities</i>	\$ 10.0	\$ —	\$ 10.0
Noncurrent - <i>Other long-term liabilities</i>	\$ 8.3	\$ —	\$ 8.3
Deferred revenue - current	\$ 243.0	\$ 204.5	\$ 38.5
Advances from customers - current	\$ 23.3	\$ —	\$ 23.3
Advances from customers - noncurrent	\$ 29.4	\$ 15.0	\$ 14.4

Deferred revenue activity in the year ended December 31, 2019, follows (in millions):

	Deferred Sales in the Period	Previously Deferred Sales Recognized in the Period	Change
Deferred revenue	49.2	(10.7)	38.5

LEU Segment

Under the terms of certain contracts with customers in the LEU segment, the Company will accept payment in the form of uranium. Revenue from the sale of SWU under such contracts is recognized at the time LEU is delivered and is based on the fair value of the uranium at contract inception, or as the quantity of uranium is finalized, if variable. In 2019, SWU revenue of \$23.4 million was recognized under such contracts based on the fair market value of uranium acquired in exchange for SWU delivered. Uranium received from customers as advance payments for the future sales of SWU totaled \$52.7 million as of December 31, 2019. The advance payments are included in either *Advances from Customers, Current* or *Advances from Customers, Noncurrent*, based on the anticipated SWU sales period.

In the third quarter of 2019, the Company borrowed SWU inventory valued at \$1.7 million from a customer under terms that require repayment within 48 months. The Company recorded the SWU and the related liability for the borrowings using an average purchase price over the borrowing period. The cumulative liability to the customer of \$9.0 million for borrowed inventory is included in *Other Liabilities*, which is included in noncurrent liabilities.

The SWU component of LEU is typically bought and sold under long-term contracts with deliveries over several years. The Company's agreements for natural uranium sales are generally shorter-term, fixed-commitment contracts. The Company's order book of sales under contract in the LEU segment ("order book") extends to 2030. As of December 31, 2019 and December 31, 2018, the order book was \$1.0 billion. The order book is the estimated aggregate dollar amount of revenue for future SWU and uranium deliveries under contract and includes the *Deferred Revenue* and *Advances from Customers* amounts in the Contract Balances table above. Approximately \$0.9 billion of the order book as of December 31, 2019 is anticipated to be recognized as revenue beyond 2020.

Most of the Company's contracts provide for fixed purchases of SWU during a given year. The Company's order book is partially based on customers' estimates of the timing and size of their fuel requirements and other assumptions that are subject to change. For example, depending on the terms of specific contracts, the customer may be able to increase or decrease the quantity delivered within an agreed range. The Company's order book estimate is also based on the Company's estimates of selling prices, which may be subject to change. For example, depending on the terms of specific contracts, prices may be adjusted based on escalation using a general inflation index, published SWU price indicators prevailing at the time of delivery, and other factors, all of which are variable. The Company uses external composite forecasts of future market prices and inflation rates in its pricing estimates.

Technical Solutions Segment

Revenue for the technical solutions segment, representing the Company's technical, manufacturing, engineering, procurement, construction and operations services offered to public and private sector customers, is recognized over the contractual period as services are rendered. For details, refer to Note 1, *Summary of Significant Accounting Policies — Revenue — Technical Solutions Revenue*.

On October 31, 2019, the Company signed a three-year cost-share contract with the U.S. Department of Energy ("DOE") ("the HALEU Contract") to deploy a cascade of centrifuges to demonstrate production of high-assay, low-enriched uranium ("HALEU") for advanced reactors. HALEU is a component of an advanced nuclear reactor fuel that is not commercially available today and may be required for a number of advanced reactor designs currently under development in both the commercial and government sectors. The program has been under way since May 31, 2019, when the Company and DOE signed a preliminary letter agreement that allowed work to begin while the full contract was being finalized.

Under the HALEU Contract, DOE agreed to reimburse the Company for 80% of its costs incurred in performing the contract, up to a maximum of \$115 million. The Company's cost share is the corresponding 20% and any costs incurred above these amounts. Costs under the HALEU Contract include *program costs*, including direct labor and materials and associated indirect costs that are classified as *Cost of Sales*, and an allocation of corporate costs supporting the program that are classified as *Selling, General and Administrative Expenses*. Services to be provided over the three-year contract include constructing and assembling centrifuge machines and related infrastructure in a cascade formation. When estimates of remaining program costs to be incurred for such an integrated, construction-type contract exceed estimates of total revenue to be earned, a provision for the remaining loss on the contract is recorded to *Cost of Sales* in the period the loss is determined. The Company's corporate costs supporting the program are recognized as expense as incurred over the duration of the contract term. As of December 31, 2019, the portion of the Company's anticipated cost share under the HALEU Contract representing the Company's share of remaining projected program costs was recognized in *Cost of Sales* as an accrued loss of \$18.3 million, consisting of \$10.0 million included in *Accounts Payable and Accrued Liabilities* and \$8.3 million included in *Other Long-Term Liabilities*. The accrued loss on the contract will be adjusted over the remaining contract term based on actual results and remaining program cost projections. The HALEU Contract is incrementally funded and DOE is currently obligated for costs up to approximately \$53.2 million of the \$115 million. The Company received cash payments of \$10.7 million through December 31, 2019. Of the \$115 million of anticipated revenue over the three-year contract term, approximately \$40 million is anticipated to be recognized as revenue in 2021-2022 (beyond twelve months from the fiscal year ended December 31, 2019).

On January 11, 2018, the Company entered into a settlement agreement with DOE and the U.S. government regarding breach of contract claims brought by the Company relating to work performed by the Company under contracts with DOE and subcontracts with DOE contractors. In connection with the settlement, the Company (a) received \$4.7 million from the U.S. government, (b) applied approximately \$19.3 million of advances from the U.S. government received in prior years against the receivables balance, and (c) recorded additional revenue of \$9.5 million.

Centrus and DOE have yet to fully settle the Company's claims for reimbursements for certain pension and postretirement benefits costs related to past contract work performed for DOE. There is the potential for additional income to be recognized for this work pending the outcome of legal proceedings related to the Company's claims for payment and the potential release of previously established valuation allowances on receivables. As a result of the application of fresh start accounting following the Company's emergence from Chapter 11 bankruptcy on September 30, 2014, the receivables related to the Company's claims for payment are carried at fair value as of September 30, 2014, which is net of the valuation allowances. Refer to *Note 17, Commitments and Contingencies*.

3. SPECIAL CHARGES

As a result of the HALEU letter agreement in the second quarter of 2019, special charges in 2019 included a credit of \$2.9 million for the reversal of accrued termination benefits for employees who were retained at the Company's facility in Piketon, Ohio. For 2018, special charges totaled \$2.2 million, consisting of estimated employee termination benefits related to corporate functions of \$2.1 million and advisory costs related to updating the Company's information technology systems of \$0.1 million. The remaining balance of termination benefits of \$1.4 million is expected to be paid within twelve months and is classified in *Accounts Payable and Accrued Liabilities* in the consolidated balance sheet.

A summary of termination benefit activity and the accrued liability follows (in millions):

	Liability December 31, 2018	Year Ended December 31, 2019		Liability December 31, 2019
		Charges (Credits) for Termination Benefits	Paid/ Settled	
Workforce reductions:				
Corporate functions	\$ 0.9	\$ 1.0	\$ (0.7)	\$ 1.2
Piketon facility	3.2	(2.9)	(0.1)	0.2
Total	\$ 4.1	\$ (1.9)	\$ (0.8)	\$ 1.4

4. CASH, CASH EQUIVALENTS AND RESTRICTED CASH

The following table summarizes the Company's cash, cash equivalents and restricted cash as presented on the consolidated balance sheet to amounts on the consolidated statement of cash flows (in millions):

	December 31,	
	2019	2018
Cash and cash equivalents	\$ 130.7	\$ 123.1
Deposits for financial assurance - current	0.2	30.3
Deposits for financial assurance - noncurrent	5.7	6.3
Total cash, cash equivalents and restricted cash	\$ 136.6	\$ 159.7

The following table provides additional detail regarding the Company's deposits for financial assurance (in millions):

	December 31, 2019		December 31, 2018	
	Current	Long-Term	Current	Long-Term
Piketon facility obligations	\$ —	\$ —	\$ 30.1	\$ —
Workers compensation	—	5.4	—	6.0
Other	0.2	0.3	0.2	0.3
Total deposits for financial assurance	\$ 0.2	\$ 5.7	\$ 30.3	\$ 6.3

Piketon Facility Obligations and Surety Bonds

Centrus leases facilities and related personal property in Piketon, Ohio from DOE. Centrus previously provided financial assurance in the form of surety bonds to DOE for lease turnover obligations and to the U.S. Nuclear Regulatory Commission ("NRC") for decontamination and decommissioning ("D&D") obligations related to the facility. These surety bonds were fully cash collateralized by the Company. The Company completed its obligations and, in 2019, the financial assurance instruments were cancelled and the Company received the cash collateral totaling \$30.5 million including interest.

Financial Assurance for Workers' Compensation

The Company has provided financial assurance to states in which it was previously self-insured for workers' compensation in accordance with each state's requirements in the form of a surety bond or letters of credit that are fully cash collateralized by the Company. As each state determines that the likelihood of further workers' compensation obligations related to the period of self-insurance is reduced, the surety bond or letters of credit are subject to cancellation and the Company would receive the cash collateral. In 2019, the Company received \$0.6 million as return of cash collateral related to the cancellation of a letter of credit.

5. INVENTORIES

Centrus holds uranium at licensed locations in the form of natural uranium and as the uranium component of LEU. Centrus also holds SWU as the SWU component of LEU at licensed locations (e.g., fabricators) to meet book transfer requests by customers. Fabricators process LEU into fuel for use in nuclear reactors. Components of inventories are as follows (in millions):

	December 31, 2019			December 31, 2018		
	Current Assets	Current Liabilities (a)	Inventories, Net	Current Assets	Current Liabilities (a)	Inventories, Net
Separative work units	\$ 7.8	\$ —	\$ 7.8	\$ 20.1	\$ 3.6	\$ 16.5
Uranium	56.7	5.6	51.1	109.6	99.4	10.2
Total	\$ 64.5	\$ 5.6	\$ 58.9	\$ 129.7	\$ 103.0	\$ 26.7

(a) Inventories owed to customers and suppliers, included in current liabilities, include SWU and uranium inventories owed to fabricators.

Inventories are valued at the lower of cost or net realizable value. Valuation adjustments for uranium inventory to reflect declines in uranium market price indicators totaled \$2.3 million in 2019. There were no valuation adjustments in 2018.

In March 2019, the Company completed a one-time purchase of SWU and uranium from Nuclear Fuel Industries, Ltd. (“NFI”) for \$7.1 million pursuant to an August 2018 agreement between Enrichment Corp. and NFI. Toshiba America Nuclear Energy Corporation (“TANE”) holds 718,200 shares of the Company’s Class B common stock and certain of the Company’s 8.25% senior notes due 2027. Each of NFI and TANE are wholly-owned, indirect subsidiaries of Toshiba Corporation.

6. PROPERTY, PLANT AND EQUIPMENT

A summary of changes in property, plant and equipment follows (in millions):

	December 31, 2018	Additions / (Depreciation)	December 31, 2019
Land	\$ 1.2	\$ —	\$ 1.2
Leasehold improvements	2.5	—	2.5
Machinery and equipment	1.0	0.1	1.1
Other	1.1	—	1.1
Property, plant and equipment, gross	5.8	0.1	5.9
Accumulated depreciation	(1.6)	(0.6)	(2.2)
Property, plant and equipment, net	\$ 4.2	\$ (0.5)	\$ 3.7

Depreciation expense was \$0.6 million in 2019 and \$0.8 million in 2018.

The Company sold fully-depreciated property for \$0.7 million in 2019 and \$0.4 million in 2018. Cash proceeds received totaled \$0.7 million in 2019 and \$0.5 million in 2018, including \$0.1 million received in 2018 for sales occurring in 2017.

7. INTANGIBLE ASSETS

Intangible assets originated from the Company's reorganization and application of fresh start accounting as of September 30, 2014, the date the Company emerged from bankruptcy, and reflect the conditions at that time. The intangible asset related to the sales order book is amortized as the order book existing at emergence is reduced, principally as a result of deliveries to customers. The intangible asset related to customer relationships is amortized using the straight-line method over the estimated average useful life of 15 years. Amortization expense is presented below gross profit on the consolidated statements of operations. Intangible asset balances are as follows (in millions):

	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Sales order book	\$ 54.6	\$ 29.9	\$ 24.7	\$ 54.6	\$ 28.0	\$ 26.6
Customer relationships	68.9	24.1	44.8	68.9	19.5	49.4
Total	\$ 123.5	\$ 54.0	\$ 69.5	\$ 123.5	\$ 47.5	\$ 76.0

The amount of amortization expense for intangible assets in each of the succeeding years is estimated to be as follows (in millions):

2020	\$ 7.0
2021	7.6
2022	10.5
2023	7.2
2024	8.0
Thereafter	29.2
Total	\$ 69.5

8. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Components of accounts payable and accrued liabilities follow (in millions):

	December 31,	
	2019	2018
Trade payables	\$ 7.0	\$ 3.9
Postretirement health and life benefit obligations - current	14.2	15.4
Compensation and employee benefits	13.1	22.4
Accrued HALEU contract loss - current	10.0	—
Operating lease liability	2.5	—
Severance	1.4	4.1
Accrued interest on 8% PIK Toggle Notes	—	0.6
Other accrued liabilities	2.5	6.0
Total accounts payable and accrued liabilities	\$ 50.7	\$ 52.4

9. DEBT

A summary of debt follows (in millions):

	Maturity	December 31, 2019		December 31, 2018	
		Current	Long-Term	Current	Long-Term
8.25% Notes:	Feb. 2027				
Principal		\$ —	\$ 74.3	\$ —	\$ 74.3
Interest		6.1	39.8	6.1	45.9
8.25% Notes		\$ 6.1	\$ 114.1	\$ 6.1	\$ 120.2
8% PIK Toggle Notes	Sep. 2019	\$ —	\$ —	\$ 26.7	\$ —
Total		\$ 6.1	\$ 114.1	\$ 32.8	\$ 120.2

Repayment of 8% PIK Toggle Notes

On September 30, 2019, the Company repaid the outstanding 8% PIK Toggle Notes that matured on September 30, 2019. The Company paid a total of \$28.5 million, including \$1.0 million in accrued interest. The payment was made in accordance with the terms of the Indenture dated September 30, 2014 (as amended, supplemented, or otherwise modified from time to time) among the Company, Enrichment Corp., as the note guarantor, and Delaware Trust Company, as trustee and collateral agent. The payment constituted full satisfaction and discharge of the Indenture and the Notes.

Interest on the 8% PIK Toggle Notes was payable semi-annually in arrears on March 31 and September 30 based on a 360-day year consisting of twelve 30-day months. The principal amount was increased by any payment of interest in the form of PIK payments. The Company had the option to pay up to 5.5% per annum of interest due on the 8% PIK Toggle Notes in the form of in-kind PIK payments. For the semi-annual interest periods in 2018 and 2019, the Company elected to pay interest in the form of PIK payments at 5.5% per annum. Financing costs for the issuance of the 8% PIK Toggle Notes were deferred and were amortized on a straight-line basis, which approximates the effective interest method, over the life of the 8% PIK Toggle Notes. The remaining financing costs were amortized with the final payment on September 30, 2019.

December 2018 Note Exchange

On December 6, 2018, Centrus entered into Exchange Agreements (the “Exchange Agreements”) with certain holders of the Company’s outstanding 8% PIK Toggle Notes. Under the terms of the Exchange Agreements, the Company exchanged \$6.3 million aggregate principal amount of 8% PIK Toggle Notes for 398,638 shares of Class A Common Stock and approximately \$5.1 million in cash, which included accrued and unpaid interest on the Notes. The Company recognized a gain on extinguishment of \$0.5 million, which is net of transaction costs and previously deferred costs related to the 8% PIK Toggle Notes of less than \$0.1 million. Refer to *Note 15, Stockholders’ Equity* for details related to the Common Stock.

8.25% Notes

Interest on the 8.25% Notes is payable semi-annually in arrears as of February 28 and August 31 based on a 360-day year consisting of twelve 30-day months. The 8.25% Notes mature on February 28, 2027. As described above, all future interest payment obligations on the 8.25% Notes are included in the carrying value of the 8.25% Notes. As a result, the Company’s reported interest expense will be less than its contractual interest payments throughout the term of the 8.25% Notes. As of December 31, 2019, and December 31, 2018, \$6.1 million of interest is recorded as current and classified as *Current Debt* in the consolidated balance sheet.

The 8.25% Notes rank equally in right of payment with all of the Company's existing and future unsubordinated indebtedness other than its Issuer Senior Debt and our Limited Secured Acquisition Debt (each as defined below). The 8.25% Notes rank senior in right of payment to all of the Company's existing and future subordinated indebtedness and to certain limited secured acquisition indebtedness of the Company (the "Limited Secured Acquisition Debt"). The Limited Secured Acquisition Debt includes (i) any indebtedness, the proceeds of which are used to finance all or a portion of an acquisition or similar transaction if any lender's lien is solely limited to the assets acquired in such a transaction and (ii) any indebtedness, the proceeds of which are used to finance all or a portion of the American Centrifuge project or another next generation enrichment technology if any lender's lien is solely limited to such assets, *provided that* a lien securing the 8.25% Notes that is junior with respect to the lien securing such indebtedness will be limited to the assets acquired with such Limited Secured Acquisition Debt.

The 8.25% Notes are subordinated in right of payment to certain indebtedness and obligations of the Company, as described in the 8.25% Notes Indenture (the "Issuer Senior Debt"), including (i) any indebtedness of the Company (inclusive of any indebtedness of Enrichment Corp.) under a future credit facility up to \$50 million with a maximum net borrowing of \$40 million after taking into account any minimum cash balance (unless a higher amount is approved with the consent of the holders of a majority of the aggregate principal amount of the 8.25% Notes then outstanding), (ii) any revolving credit facility to finance inventory purchases and related working capital needs, and (iii) any indebtedness of the Company to Enrichment Corp. under the secured intercompany notes.

The 8.25% Notes are guaranteed on a subordinated and limited basis by, and secured by substantially all of the assets of, Enrichment Corp. The Enrichment Corp. guarantee is a secured obligation and ranks equally in right of payment with all existing and future unsubordinated indebtedness of Enrichment Corp. (other than Designated Senior Claims (as defined below) and Limited Secured Acquisition Debt) and senior in right of payment to all existing and future subordinated indebtedness of Enrichment Corp. and Limited Secured Acquisition Debt. The Enrichment Corp. guarantee is subordinated in right of payment to certain obligations of, and claims against, Enrichment Corp. described in the 8.25% Notes Indenture (collectively, the "Designated Senior Claims"), including obligations and claims:

- under a future credit facility up to \$50 million with a maximum net borrowing of \$40 million after taking into account any minimum cash balance;
- under any revolving credit facility to finance inventory purchases and related working capital needs;
- held by or for the benefit of the Pension Benefit Guaranty Corporation ("PBGC") pursuant to any settlement (including any required funding of pension plans); and
- under surety bonds or similar obligations held by or on behalf of the U.S. government pursuant to regulatory requirements.

The lien securing the Enrichment Corp. guarantee of the 8.25% Notes is junior in priority with respect to the lien securing Limited Secured Acquisition Debt, which is limited to the assets acquired with such Limited Secured Acquisition Debt.

10. LEASES

Centrus leases facilities and equipment under operating leases. Lease expense for operating leases is recognized on a straight-line basis over the lease term. The Company has facility leases with terms greater than 12 months, and the Company records the related asset and obligation at the present value of lease payments over the term. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Refer to *Note 1, Summary of Significant Accounting Policies*, for information regarding the Company's adoption of Topic 842 on January 1, 2019.

Lease assets represent the right to use an underlying asset for the lease term, and lease liabilities represent the obligation to make lease payments arising from the lease. Lease assets exclude lease incentives. Lease terms reflect options to extend or terminate the lease when it is reasonably certain that those options will be exercised. The depreciable life of lease assets and leasehold improvements is limited by the expected lease term. The weighted-average remaining lease term was 3.6 years at December 31, 2019, with maturity dates ranging from July 2021 to September 2027, and the weighted-average discount rate was 12.1%. Lease expense amounted to \$2.7 million for the year ended December 31, 2019. Lease expense was \$3.1 million for the year ended December 31, 2018. Lease expense primarily related to operating leases and for the year ended December 31, 2019 includes a \$0.5 million credit from DOE for true up of prior year lease expense. Other amounts related to short-term lease expense were insignificant. Operating lease expense is included in Cost of Sales, Selling, General and Administrative Expenses and Advance Technology Costs on the Statement of Operations. Cash paid for amounts included in operating cash flows for operating leases was \$2.9 million for the year ended December 31, 2019.

The Company leases facilities and related personal property in Piketon, Ohio from DOE. On May 31, 2019, in connection with the HALEU letter agreement, DOE and the Company amended the lease agreement, which was scheduled to expire by its terms on June 30, 2019. The lease was renewed and extended until May 31, 2022, provided, however, that the lease may be terminated early upon completion of the work under the HALEU Contract. Any facilities, centrifuges or other equipment constructed or installed under contract with DOE will be owned by DOE and may be returned to DOE in an "as is" condition at the end of the lease term, and DOE would be responsible for its D&D. The Company accounted for the amendment as a modification and reassessed its classification. The Company classified the lease as an operating lease as the lease does not contain a transfer of ownership or purchase option, the fair value of the underlying asset cannot be practicably determined, and the economic life of the asset is indeterminate. The remeasurement of the remaining future lease payments through May 31, 2022 resulted in the recording of \$3.8 million of additional lease assets and liabilities related to the modification. The modification resulted in an insignificant impact on the consolidated statement of operations. On October 8, 2019 the DOE notified the Company of an increase in the monthly lease payment beginning with the October 2019 payment. The Company accounted for the amendment as a modification and reassessed its classification. The remeasurement of the remaining future lease payments through May 31, 2022 resulted in the recording of \$1.4 million additional lease assets and liabilities related to the modification.

Centrus had a lease with DOE for centrifuge testing facilities in Oak Ridge, Tennessee through December 2019. In connection with the completion of work performed for D&D of the facility, the Company terminated the lease on September 30, 2019. The Company derecognized the remaining lease asset and related liability of \$0.2 million. There was no gain or loss associated with the termination of the lease.

Operating Lease Assets and Liabilities

The table below presents the lease-related assets and liabilities recorded on the balance sheet (in millions).

	December 31, 2019	Classification on the Balance Sheet
Lease assets	\$ 7.2	Other long-term assets
Lease liabilities:		
Current	2.5	Accounts payable and accrued liabilities
Noncurrent	7.0	Other long-term liabilities
Total lease liabilities	<u>\$ 9.5</u>	

Maturity of Operating Lease Liabilities

The table below reconciles undiscounted payments for operating leases with terms greater than 12 months to the operating lease liabilities recorded on the balance sheet (in millions).

2020	\$ 3.2
2021	3.2
2022	1.9
2023	1.0
2024	1.0
Thereafter	2.8
Total lease payments	<u>13.1</u>
Less imputed interest	3.6
Present value of lease payments	<u>\$ 9.5</u>

Minimum Lease Payments

Prior to the adoption of Topic 842, future estimated minimum lease payments as of December 31, 2018 for leases with remaining terms in excess of one year were as follows (in millions):

2019	\$ 0.9
2020	0.9
2021	0.9
2022	1.0
2023	1.0
Thereafter	3.8
	<u>\$ 8.5</u>

11. FAIR VALUE

Fair value is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value of assets and liabilities, the following hierarchy is used in selecting inputs, with the highest priority given to Level 1, as these are the most transparent or reliable:

- Level 1 – quoted prices for identical instruments in active markets.
- Level 2 – quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable in active markets.
- Level 3 – valuations derived using one or more significant inputs that are not observable.

Financial Instruments Recorded at Fair Value (in millions):

	December 31, 2019				December 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash and cash equivalents	\$ 130.7	\$ —	\$ —	\$ 130.7	\$ 123.1	\$ —	\$ —	\$ 123.1
Deferred compensation asset (a)	1.8	—	—	1.8	1.4	—	—	1.4
Liabilities:								
Deferred compensation obligation (a)	\$ 1.8	\$ —	\$ —	\$ 1.8	\$ 1.4	\$ —	\$ —	\$ 1.4

- (a) The deferred compensation obligation represents the balance of deferred compensation plus net investment earnings. The deferred compensation plan is funded through a rabbi trust. Trust funds are invested in mutual funds for which unit prices are quoted in active markets and are classified within Level 1 of the valuation hierarchy.

There were no transfers between Level 1, 2 or 3 during the periods presented.

Other Financial Instruments

As of December 31, 2019, and December 31, 2018, the balance sheet carrying amounts for *Accounts Receivable*, *Accounts Payable* and *Accrued Liabilities* (excluding the deferred compensation obligation described above), and *Payables under SWU Purchase Agreements* approximate fair value because of their short-term nature.

The carrying value and estimated fair value of long-term debt are as follows (in millions):

	December 31, 2019		December 31, 2018	
	Carrying Value	Estimated Fair Value ^(a)	Carrying Value	Estimated Fair Value ^(a)
8.25% Notes	\$ 120.2 ^(b)	\$ 61.5	\$ 126.3 ^(b)	\$ 57.9
8% PIK Toggle Notes	—	—	26.7	21.8

- ^(a) Based on recent trading prices and bid/ask quotes as of or near the balance sheet date, which are considered Level 2 inputs based on the frequency of trading.

- ^(b) The carrying value of the 8.25% Notes consists of the principal balance of \$74.3 million and the sum of current and noncurrent interest payment obligations until maturity. Refer to *Note 9, Debt*.

12. PENSION AND POSTRETIREMENT HEALTH AND LIFE BENEFITS

There are approximately 5,000 employees and retirees covered by qualified defined benefit pension plans providing retirement benefits based on compensation and years of service, and approximately 3,100 employees and retirees covered by postretirement health and life benefit plans. DOE retained the obligation for postretirement health and life benefits for workers who retired prior to July 28, 1998. Pursuant to non-qualified supplemental pension plans, Centrus provides certain executive officers additional retirement benefits in excess of qualified plan limits imposed by tax law based on a targeted benefit objective. Employees hired on or after September 1, 2008, who are not covered by a collective bargaining agreement that provides for participation do not participate in a qualified defined benefit pension plan or postretirement health and life benefit plans.

Changes in the projected benefit obligations and plan assets and the funded status of the plans follow:

(\$ millions)	Defined Benefit Pension Plans		Postretirement Health and Life Benefit Plans	
	Year Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Changes in Benefit Obligations:				
Obligations at beginning of period	\$ 733.8	\$ 817.9	\$ 151.6	\$ 170.7
Actuarial (gains) losses, net	59.8	(50.8)	9.1	(13.1)
Service costs	3.3	3.4	—	—
Interest costs	30.3	28.7	6.0	5.8
Benefits paid	(55.9)	(57.5)	(13.9)	(11.8)
Lump sum benefits paid	(3.2)	(4.8)	—	—
Plan amendments	(1.3)	—	—	—
Administrative expenses paid	(3.3)	(3.1)	—	—
Obligations at end of period	763.5	733.8	152.8	151.6
Changes in Plan Assets:				
Fair value of plan assets at beginning of period	563.5	654.6	—	1.8
Actual return on plan assets	109.3	(40.2)	—	—
Company contributions	10.8	14.5	13.9	10.0
Benefits paid	(55.9)	(57.5)	(13.9)	(11.8)
Lump sum benefits paid	(3.2)	(4.8)	—	—
Administrative expenses paid	(3.3)	(3.1)	—	—
Fair value of plan assets at end of period	621.2	563.5	—	—
Unfunded status at end of period	\$ (142.3)	\$ (170.3)	\$ (152.8)	\$ (151.6)
Amounts recognized in assets and liabilities:				
Current liabilities	\$ (0.5)	\$ (1.4)	(14.2)	(15.4)
Noncurrent liabilities	(141.8)	(168.9)	(138.6)	(136.2)
	<u>\$ (142.3)</u>	<u>\$ (170.3)</u>	<u>\$ (152.8)</u>	<u>\$ (151.6)</u>
Amounts in accumulated other comprehensive income (loss), pre-tax:				
Prior service cost (credit)	<u>\$ (1.3)</u>	<u>\$ —</u>	<u>\$ (2.3)</u>	<u>\$ (2.4)</u>
Discount rate used to determine benefit obligations at end of period:	3.3%	4.3%	3.3%	4.3%

The current liabilities reflect expected contributions for benefit payments for the non-qualified plans and the postretirement health and life benefit plans in the following year.

The discount rates above, rounded to the nearest 0.1%, are the estimated rates at which the benefit obligations could be effectively settled on the measurement date and are based on yields of high quality fixed income investments whose cash flows match the timing and amount of expected benefit payments of the plans.

Plan assets and benefit obligations are remeasured each year as of the balance sheet date resulting in differences between actual and projected results for the year. These actuarial gains and losses are recognized in the statement of operations in the fourth quarter. In addition, an interim remeasurement and recognition of gains or losses may be required for a plan during the year when lump sum payments exceed, or are expected to exceed, the sum of the service cost and interest cost components of the annual net periodic benefit cost for that plan for the current year. There were no interim remeasurements in 2019 and 2018.

The defined benefit pension plans currently allow for a lump sum payment option to (a) active employees who are terminated as a result of Company reductions in force and (b) periodically to terminated vested participants. In March 2019, the lump sum payment option was made permanent to those terminated vested participants who have not yet begun receiving their benefits and have been terminated as a result of a reduction in force by the Company, or due to voluntary termination or involuntary termination, other than involuntary termination as a termination for cause.

Projected benefit obligations are based on actuarial assumptions including possible future increases in compensation. *Accumulated benefit obligations* are based on actuarial assumptions but do not include possible future increases in compensation. Effective August 2013, accrued benefits under the defined benefit pension plans are fixed and no longer increase to reflect changes in compensation or company service. Therefore, the accumulated benefit obligation equaled the projected benefit obligation of \$763.5 million and \$733.8 million as of December 31, 2019 and 2018, respectively. As of December 31, 2019 and 2018, none of Centrus' plans had fair value of plan assets in excess of accumulated benefit obligations.

Components of Net Periodic Benefit Costs and Other Amounts Recognized in Other Comprehensive Income (Loss)

The Company reports service costs for its defined benefit pension plans and its postretirement health and life benefit plans in *Cost of Sales and Selling, General and Administrative Expenses*. The remaining components of net periodic benefit credits (costs) are reported as *Nonoperating Components of Net Periodic Benefit Expense (Income)*.

(in millions)	Defined Benefit Pension Plans		Postretirement Health and Life Benefit Plans	
	Year Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Net Periodic Benefit (Credits) Costs				
Service costs	\$ 3.3	\$ 3.4	\$ —	\$ —
Interest costs	30.3	28.7	6.0	5.8
Expected return on plan assets (gains)	(36.4)	(41.0)	—	—
Amortization of prior service costs (credits), net	—	—	(0.1)	(0.2)
Actuarial (gains) losses, net	(13.1)	30.4	9.1	(13.1)
Net periodic benefit (credits) costs	<u>\$ (15.9)</u>	<u>\$ 21.5</u>	<u>\$ 15.0</u>	<u>\$ (7.5)</u>
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income (Loss)				
Amortization of prior service (costs) credits, net	\$ —	\$ —	\$ 0.1	\$ 0.2
Prior service cost/(credit)	(1.3)	—	—	—
Total recognized in other comprehensive income (loss), pre-tax	<u>\$ (1.3)</u>	<u>\$ —</u>	<u>\$ 0.1</u>	<u>\$ 0.2</u>
Total recognized in net periodic benefit costs (income) and other comprehensive income (loss), pre-tax	<u>\$ (17.2)</u>	<u>\$ 21.5</u>	<u>\$ 15.1</u>	<u>\$ (7.3)</u>

Net periodic benefit costs include service and interest costs of providing pension benefits that are accrued over the years employees render service. Prior service costs or credits are amortized over the employees' average remaining years of service from age 40 until the date of full benefit eligibility or the average expected future lifetime of all plan participants, as applicable. Participants in the postretirement health and life benefit plans are generally eligible for benefits at retirement after age 50 with 10 years of continuous credited service at the time of retirement.

Effective January 1, 2014, or for certain plan participants formerly represented by a collective bargaining unit, January 1, 2015, plan participants age 65 or older ("post-65") have access to a range of medical plan choices with varying costs and benefits through a Medicare Exchange implemented by the Company. The Company provides an annual stipend for each of the post-65 retirees and post-65 spouses who enroll in the coverage through the exchange. Depending on the level of benefits elected by the participant, the participant may be required to make contributions in excess of the stipend amount.

The transition to the post-65 Medicare Exchange was reflected as a plan amendment that reduced plan obligations by \$6.8 million as of December 31, 2014. This reduction in obligation was recognized in other comprehensive income in 2014 as a prior service credit. The prior service credit is being amortized into net periodic benefit cost as a credit over time. The post-65 Medicare Exchange stipend amount was increased for 2017. This increase in obligation of \$3.6 million as of December 31, 2016, was recognized in other comprehensive income in 2016 as a prior service cost and is being amortized into net periodic benefit cost over time. The post-65 Medicare Exchange stipend amount was increased in 2018, as specified in a settlement agreement with the former collective bargaining unit. The settlement agreement also specifies the addition of catastrophic drug coverage effective January 1, 2019. The benefit enhancement for 2019 has been applied to all post-65 participants regardless of past representation by the collective bargaining agreement. The increase in obligation of \$10.0 million as a result of the settlement agreement was recognized in net periodic benefit costs in 2017 as a plan change resulting from a legal settlement and is reported in *Nonoperating Components of Net Periodic Benefit Expense (Income)*.

The defined benefits pension plans were amended in March 2019 making permanent the option for pension-eligible employees to receive a lump sum payment upon termination, regardless of benefit size, which decreased plan obligations by \$1.3 million. The effect of these plan changes have been added to accumulated other comprehensive income (loss) as an unrecognized prior service cost to be amortized over the average future service of active employees starting in 2020.

Assumptions Used to Determine Net Periodic Benefit Costs

	Defined Benefit Pension Plans		Postretirement Health and Life Benefit Plans	
	Year Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Discount rate	3.3%	4.3%	3.3%	4.3%
Expected return on plan assets	6.8%	6.8%	—	—

The expected return on plan assets is based on the weighted average of long-term return expectations for the composition of the plans' equity and debt securities. Expected returns on equity securities are based on historical long-term returns of equity markets. Expected returns on debt securities are based on the current interest rate environment.

Healthcare cost trend rates used to measure postretirement health benefit obligations follow:

	December 31,	
	2019	2018
Healthcare cost trend rate for the following year	6.0%	6.0%
Long-term rate that the healthcare cost trend rate gradually declines to	5%	5%
Year that the healthcare cost trend rate is expected to reach the long-term rate	2022	2021

A one-percentage-point change in the assumed healthcare cost trend rates would have an effect on the postretirement health benefit obligation and costs as follows:

(in millions)	One-Percentage Point	
	Increase	Decrease
Postretirement health benefit obligation	\$ 3.5	\$ (3.0)
Net periodic benefit costs (service and interest cost components only)	\$ 0.1	\$ (0.1)

Benefit Plan Assets

Independent advisors manage investment assets of Centrus' defined benefit pension plans and postretirement health and life benefit plans. Centrus has the fiduciary responsibility for reviewing performance of the various investment advisors. The goal of the investment policy of the plans is to maximize portfolio returns within reasonable and prudent levels of risk in order to meet projected liabilities and maintain sufficient cash to make timely payments of all participant benefits. Risk is reduced by diversifying plan assets and following a strategic asset allocation approach. Asset classes and target weights are adjusted periodically to optimize the long-term portfolio risk/return tradeoff, to provide liquidity for benefit payments, and to align portfolio risk with the underlying obligations. The investment policy of the plans prohibits the use of leverage, direct investments in tangible assets, or any investment prohibited by applicable laws or regulations.

The allocation of plan assets between equity and debt securities and the target allocation range by asset category for the defined benefit pension plans follows:

	December 31,		2020 Target
	2019	2018	
Equity securities	48%	48%	40 - 60%
Debt securities	49%	49%	40 - 60%
Cash	3%	3%	0 - 5%
	100%	100%	

Prefunding for the postretirement health and life benefit plans was discontinued in 2012 and the remaining assets were expended in early 2018. Benefit costs of the postretirement health and life benefit plans are funded as costs are incurred.

Plan assets are measured at fair value. Following are the plan investments as of December 31, 2019 and 2018, categorized by the fair value hierarchy levels described in *Note 11, Fair Value Measurements*:

(in millions)	Defined Benefit Pension Plans							
	Level 1		Level 2		Level 3		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
U.S. government securities	\$ —	\$ —	\$ 32.7	\$ 34.6	\$ —	\$ —	\$ 32.7	\$ 34.6
Corporate debt	—	—	121.1	104.7	—	—	121.1	104.7
Municipal bonds and non-U.S. government securities	—	—	2.1	2.0	—	—	2.1	2.0
Mortgage and asset backed securities	—	—	11.0	4.2	—	—	11.0	4.2
Fair value of investments by hierarchy level	\$ —	\$ —	\$ 166.9	\$ 145.5	\$ —	\$ —	\$ 166.9	\$ 145.5
Investments measured at NAV (a)							453.5	416.1
Accrued interest receivable							1.8	1.8
Unsettled transactions							(1.0)	0.1
Plan assets							\$ 621.2	\$ 563.5

(a) Equity, bond and money market investments held in collective trusts are valued based on the net asset value (“NAV”) provided by the administrator of the funds. The NAV for each fund is based on the underlying assets owned by the fund, less any expenses accrued against the fund, divided by the number of fund shares outstanding. While the underlying investments are traded on an exchange, the funds are not. Fair values for the collective trust investments are measured using the NAVs as a practical expedient and are not categorized in the fair value hierarchy.

Level 1 assets consist of mutual funds and money market funds having a publicly available NAV.

Level 2 assets include investments in U.S. government agency securities, corporate and municipal debt that are valued based on estimated prices using observable, market-based inputs.

Benefit Plan Cash Flows

The Company expects to contribute \$16.1 million to the qualified defined benefit pension plans, \$0.5 million to the non-qualified defined benefit pension plans and \$14.2 million to the postretirement health and life benefit plans in 2020. There is no required contribution for the postretirement health and life benefit plans under Employee Retirement Income Security Act (“ERISA”).

Estimated future benefit plan payments follow (in millions):

	Defined Benefit Pension Plans	Postretirement Health and Life Benefit Plans
2020	\$ 57.2	\$ 14.2
2021	55.8	13.0
2022	54.1	12.4
2023	52.8	11.9
2024	51.1	11.1
2025 to 2029	236.7	45.4

Other Plans

The Company sponsors a 401(k) defined contribution plan for employees. Employee contributions are matched at established rates. Amounts contributed are invested in a range of investment options available to participants and the funds are administered by an independent trustee. Matching cash contributions by the Company amounted to \$1.7 million in 2019 and \$1.8 million in 2018.

Under the Executive Deferred Compensation Plan, qualified employees may defer compensation on a tax-deferred basis subject to plan limitations. Any matching contributions under the Company’s 401(k) plan that are foregone due to annual compensation limitations of the Internal Revenue Code of 1986, as amended (the “Code”) are eligible to be received from the Company under the Executive Deferred Compensation Plan, provided that the employee deferred the maximum allowable pre-tax contribution in the 401(k) plan. The Company matching contributions amounted to less than \$0.1 million in 2019 and 2018.

13. STOCK-BASED COMPENSATION

The Company's 2014 Equity Incentive Plan authorizes the issuance of stock options, stock appreciation rights, restricted stock units, restricted stock, performance awards, dividend equivalent rights and other stock-based awards, as well as cash-based awards to employees, officers, directors and other individuals providing services to the Company or its affiliates. The plan authorizes the issuance of up to 1,200,000 shares of Class A Common Stock. As of December 31, 2019, there were approximately 422,000 shares available for future awards, including approximately 120,000 shares associated with awards that were terminated or cancelled without being exercised.

A summary of stock-based compensation costs (credits) follows (in millions):

	Year Ended December 31,	
	2019	2018
Restricted stock units	\$ 0.2	\$ 0.1
Stock options	0.1	0.3
Stock appreciation rights	1.1	—
Total stock-based compensation costs (credits)	<u>\$ 1.4</u>	<u>\$ 0.4</u>
Total recognized tax benefit	<u>\$ —</u>	<u>\$ —</u>

The total recognized tax benefit is reported at the federal statutory rate net of the tax valuation allowance.

Compensation cost for restricted stock units and stock options is measured at the grant date, based on the fair value of the award, and is recognized on a straight-line basis over the requisite service period. As of December 31, 2019, there was \$0.3 million of unrecognized compensation cost, adjusted for actual forfeitures, related to non-vested stock-based payments granted, of which \$0.2 million relates to stock options and \$0.1 million relates to restricted stock units. That cost is expected to be recognized over a weighted-average period of 25 months. There were no stock options granted, exercised, or forfeited during the year ended December 31, 2018.

Stock appreciation rights for participating executives for the three-year period ended December 31, 2018, under the 2016 Executive Incentive Plan were paid in cash in 2019 totaling \$1.0 million. Stock appreciation rights are a component of the 2019 Executive Incentive Plan with incentive awards targeted following the two-year period ending December 31, 2020 and the three-year period ending December 31, 2021. The stock appreciation rights, if awarded, may be payable in common stock, cash or a combination of both at the discretion of the Board of Directors. Compensation cost for stock appreciation rights is re-measured each reporting period based on the trading price of the Company's common stock and is subject to adjustment based on the status of performance against performance goals.

Restricted Stock Units

Non-employee, independent directors are granted restricted stock units as part of their compensation for serving on the Board of Directors. Settlement of these restricted stock units is made in shares of Class A Common Stock only upon the director's retirement or other end of service. The restricted stock units generally vest over one year; however, vesting is accelerated upon (1) the director attaining eligibility for retirement, (2) termination of the director's service by reason of death or disability, or (3) a change in control. As of December 31, 2019, approximately 215,000 shares of restricted stock units could potentially be converted to Class A Common Stock once vested and settled.

The fair value of restricted stock units is determined based on the closing price of Class A Common Stock on the grant date. Compensation cost for restricted stock units is amortized to expense on a straight-line basis over the vesting period.

Stock Options

The intrinsic value of an option, if any, represents the excess of the fair value of the common stock over the exercise price. The fair value of stock option awards is estimated using the Black-Scholes option pricing model, which includes a number of assumptions including Centrus' estimates of stock price volatility, employee stock option exercise behaviors, future dividend payments, and risk-free interest rates.

The expected term of options granted is the estimated period of time from the beginning of the vesting period to the date of expected exercise or other settlement, based on historical exercises and post-vesting terminations. Centrus has estimated the expected term using the simplified method described in SEC Staff Accounting Bulletin No. 107/110, *Share-Based Payment*, due to the lack of historical exercise and post-vesting termination information available for the Company since its reorganization. Future stock price volatility is estimated based on the Company's historical volatility. The risk-free interest rate for the expected option term is based on the U.S. Treasury yield curve in effect at the time of grant. No cash dividends are expected in the foreseeable future and, therefore, an expected dividend yield of zero is used in the option valuation model. The Company recognizes forfeitures as they occur. Compensation expense is recognized for stock option awards that are expected to vest.

Assumptions used in the Black-Scholes option pricing model to value option grants follow. There were no option grants in the year ended December 31, 2018.

	Year Ended December 31, 2019
Options granted (in thousands)	100
Risk-free interest rate	1.62%
Expected volatility	73%
Expected option life (years)	6.5
Weighted-average grant date fair value	\$2.44

Stock options vest and become exercisable in equal annual installments over a three or four year period and expire ten years from the date of grant. A summary of stock option activity follows:

	Stock Options (thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life in Years	Aggregate Intrinsic Value (millions)
Outstanding at December 31, 2018	425	\$4.14	6.3	\$—
Granted	100	\$3.65		
Exercised	(7)	\$3.93		
Forfeited/Cancelled	—			
Outstanding at December 31, 2019	518	\$4.02	6.2	\$1.5
Exercisable at December 31, 2019	418	\$4.11	5.3	\$1.2

Stock options outstanding and options exercisable at December 31, 2019, follow:

Stock Exercise Price	Options Outstanding (thousands)	Remaining Contractual Life in Years	Options Exercisable (thousands)
\$5.62	15	4.9	15
\$4.37	300	5.2	300
\$3.90	23	5.6	23
\$3.93	15	5.6	15
\$2.71	50	5.8	50
\$2.68	15	6.4	15
\$3.65	100	9.8	—

14. INCOME TAXES

Income Tax Expense

The components of income tax expense follow (in millions):

	Year Ended December 31,	
	2019	2018
Current:		
Federal	\$ —	\$ —
State and local	0.2	—
Foreign	0.1	—
	0.3	—
Deferred:		
Federal	—	—
State and local	—	—
Foreign	—	—
	—	—
Income tax expense	\$ 0.3	\$ —

Deferred Taxes

Future tax consequences of temporary differences between the carrying amounts for financial reporting purposes and the Company's estimate of the tax bases of its assets and liabilities result in deferred tax assets and liabilities, as follows (in millions):

	December 31,	
	2019	2018
Deferred tax assets:		
Employee benefits costs	\$ 65.3	\$ 73.6
Inventory	17.8	11.1
Property, plant and equipment	182.3	185.9
Net operating loss and credit carryforwards	190.9	187.1
Accrued expenses	4.2	0.9
Long-term debt and financing costs	13.2	15.3
Lease liability	2.0	—
Other	0.2	0.2
Deferred tax assets	475.9	474.1
Valuation allowance	(459.5)	(456.6)
Deferred tax assets, net of valuation allowance	\$ 16.4	\$ 17.5
Deferred tax liabilities:		
Intangible assets	\$ 14.7	\$ 16.0
Lease asset	1.5	—
Prepaid expenses	0.2	1.5
Deferred tax liabilities	\$ 16.4	\$ 17.5
	<u>\$ —</u>	<u>\$ —</u>

The valuation allowance reduces the net deferred tax assets to their net realizable value. There is a full valuation allowance against net deferred taxes due to annual operating losses since 2011 and substantial uncertainty to generate future taxable income that would lead to realization of the net deferred tax assets. When a change in the tax rate or tax law has an impact on deferred taxes, we apply the change based on the years in which the deferred taxes are expected to reverse. The Company records the impact of the change in its consolidated financial statements in the period of enactment. The ultimate realization of the net deferred tax assets is dependent upon generating sufficient taxable income in future years when deferred tax assets are recoverable or are expected to reverse.

The Company has federal net operating losses of \$783.3 million generated through December 31, 2017 that currently expire through 2037. In addition, the Company has federal net operating losses and business interest expense carry forwards of \$106.8 million and \$18.5 million, respectively, generated after December 31, 2017, that do not expire. The Company has concluded that a full valuation allowance is needed for all federal net operating losses. In 2014, the federal net operating losses as well as other tax attributes consisting primarily of tax basis in property of approximately \$15.3 million were reduced as a result of Centrus' cancellation of debt income of approximately \$340 million as prescribed by Code Section 108. Centrus also has state net operating losses of \$0.2 million that currently expire through 2038. The deferred tax assets for state net operating losses and state unrealized built-in loss deductions have been reduced as a result of Centrus' tax ownership change and cancellation of debt income in 2014.

Centrus experienced an ownership change as defined under Code Section 382 on September 30, 2014 when it emerged from bankruptcy. Generally, after an ownership change, the use of federal and state net operating loss carryforwards and tax credits generated prior to the ownership change are subject to an annual limitation. However, there is an exception available to qualifying corporations that eliminates the annual limitation. Centrus can utilize this exception for federal purposes, but not for state purposes. The pre-apportioned annual state limitation is \$2.9 million. Centrus also had an unrealized built-in loss as of the ownership change date. To the extent this built-in loss

is recognized during the five-year post-ownership change period through certain depreciation and loss deductions, the same annual limitation for loss and tax credit carryforwards also applies generally to a built-in loss when it is recognized, unless the exception applies. Centrus can utilize the same exception for federal purposes when the built-in loss is recognized, but not for state purposes. To the extent the built-in loss is recognized during the five-year post-ownership change period, the same pre-apportioned state limitation will apply so that the combination of loss carryforwards and recognized built-in losses cannot exceed \$2.9 million annually.

Effective Tax Rate

A reconciliation of income taxes calculated based on the federal statutory income tax rate and the effective tax rate follows:

	Year Ended December 31,	
	2019	2018
Federal statutory tax rate	21 %	21 %
Valuation allowance against net deferred tax assets	(18)	(15)
State rate changes	1	(6)
Executive compensation	(2)	(1)
State income tax expense, net of federal benefit	(1)	1
Uncertain tax positions	(1)	—
Other non-deductible expenses	(1)	—
Effective tax rate	<u>(1)%</u>	<u>— %</u>

The effective tax rate for the year ended December 31, 2019 includes an increase to the valuation allowance against net deferred tax assets of \$3.1 million, or a change to the effective tax rate of (18)%.

The effective tax rate for the year ended December 31, 2018 includes an increase to the valuation allowance against net deferred tax assets of \$15.9 million, or a change to the effective tax rate of (15)%, and a \$6.0 million decrease to the state deferred tax assets resulting from state rate changes, or a change to the effective tax rate of (6)%.

Uncertain Tax Positions

Accounting standards require that a tax position meet a minimum recognition threshold in order for the related tax benefit to be recognized in the financial statements. The liability for unrecognized tax benefits, included in *Other Long-Term Liabilities*, was \$0.4 million as of December 31, 2019 and \$0.2 million as of December 31, 2018. If recognized, these tax benefits would impact the effective tax rate. As a result of changes to unrecognized tax benefits, the income tax provision (state tax, net of federal benefit) increased \$0.2 million during the year ended December 31, 2019 and decreased \$0.1 million during the year ended December 31, 2018. The liability for unrecognized tax benefits in the table below relates to unrecognized state income tax benefits. Centrus believes that the liability for unrecognized tax benefits will not change significantly in the next 12 months.

A reconciliation of the beginning and ending amount of unrecognized tax benefits follows (in millions):

	Year Ended December 31,	
	2019	2018
Balance at beginning of the period	\$ 0.2	\$ 0.3
Additions to tax positions of current period	0.3	—
Reductions to tax positions of prior years	(0.1)	(0.1)
Balance at end of the period	<u>\$ 0.4</u>	<u>\$ 0.2</u>

Centrus and its subsidiaries file income tax returns with the U.S. government and various states and foreign jurisdictions. As of December 31, 2019, the federal and Maryland statutes of limitation are closed with respect to all tax years through 2015, and the Kentucky statute of limitations is closed with respect to all tax years through 2014.

Centrus recognizes accrued interest related to uncertain tax positions as a component of interest expense. Reversals of previously accrued interest for income taxes is typically offset against interest expense, but if the amount is significant, it is reclassified to interest income in the consolidated statement of operations. Centrus recognizes the increase or decrease of accrued penalties for income taxes as a component of selling, general and administrative expense in the consolidated statement of operations.

The impact of accrued interest and penalties for income taxes in the consolidated statement of operations was a reduction to expenses of less than \$0.1 million for the years ended December 31, 2019 and 2018. Accrued interest and penalties for income taxes, included as a component of *Other Long-Term Liabilities*, totaled less than \$0.1 million as of December 31, 2019 and 2018.

15. NET INCOME (LOSS) PER COMMON SHARE

Basic net income (loss) per common share is calculated by dividing income (loss) allocable to common stockholders by the weighted average number of shares of common stock outstanding during the period. In calculating diluted net income (loss) per common share, the number of shares is increased by the weighted average number of potential shares related to stock compensation awards. No dilutive effect is recognized in a period in which a net loss has occurred. The weighted average number of common and common equivalent shares used in the calculation of basic and diluted income (loss) per common share are as follows:

	Year Ended December 31,	
	2019	2018
Numerator (in millions):		
Net loss	\$ (16.5)	\$ (104.1)
Preferred stock dividends - undeclared and cumulative	7.8	7.8
Net loss allocable to common stockholders	\$ (24.3)	\$ (111.9)
Denominator (in thousands):		
Average common shares outstanding - basic	9,566	9,151
Potentially dilutive shares related to stock options and restricted stock units ^(a)	—	—
Average common shares outstanding - diluted	9,566	9,151
Net loss per common share (in dollars) - basic and diluted:	\$ (2.54)	\$ (12.23)
(a) Common stock equivalents excluded from the diluted calculation as a result of a net loss in the period (in thousands)	67	23
Options outstanding and considered anti-dilutive as their exercise price exceeded the average share market price (in thousands)	352	360

16. STOCKHOLDERS' EQUITY

Common Stock

The Company's certificate of incorporation authorizes 20,000,000 shares of preferred stock, par value \$1.00 per share, 70,000,000 shares of Class A common stock, \$0.10 par value per share (the "Class A Common Stock") and 30,000,000 shares of Class B common stock, \$0.10 par value per share (the "Class B Common Stock," and together with the Class A Common Stock, the "Common Stock"). The Company has issued 9,464,889 shares of Common Stock, consisting of 8,347,427 shares of Class A Common Stock and 1,117,462 shares of Class B Common Stock.

On December 6, 2018, Centrus issued 398,638 shares of Class A Common Stock with a \$0.10 par value, as part of the securities exchange described in *Note 9, Debt*. The Class A Common Stock is recorded on the consolidated balance sheet at fair value less transaction costs, or \$0.8 million, as of December 31, 2019.

Shares of Class B Common Stock that are sold in the market are automatically converted to shares of Class A Common Stock. In 2019, a total of 288,620 shares of Class B Common Stock were sold in the market and converted to shares of Class A Common Stock.

The Company has reserved 1,200,000 shares of Class A Common Stock under its management incentive plan, of which approximately 422,000 shares are available for future awards as of December 31, 2019. Refer to *Note 13, Stock-Based Compensation*, for additional information.

The Class A Common Stock trades under the symbol "LEU" on the NYSE American trading platform.

The Class B Common Stock was issued to Toshiba America Nuclear Energy Corporation ("Toshiba") and Babcock & Wilcox Investment Company ("B&W") and has the same rights, powers, preferences and restrictions and ranks equally in all matters with the Class A Common Stock, except voting. Holders of Class B Common Stock are entitled to elect, in the aggregate, two members of the Board of Directors of the Company, subject to certain holding requirements.

Series B Preferred Stock

On February 14, 2017, Centrus issued 104,574 shares of Series B Preferred Stock as part of the securities exchange described in *Note 9, Debt*. The issuance of the Series B Preferred Stock was a non-cash financing transaction. The Series B Preferred Stock has a par value of \$1.00 per share and a liquidation preference of \$1,000 per share (the "Liquidation Preference"). The Series B Preferred Stock is recorded on the consolidated balance sheet at fair value less transaction costs, or \$4.6 million, as of December 31, 2019, and December 31, 2018.

Holders of the Series B Preferred Stock are entitled to cumulative dividends of 7.5% per annum of the Liquidation Preference. Centrus is obligated to pay cash dividends on the Series B Preferred Stock in an amount equal to the Liquidation Preference to the extent that dividends are declared by the Board and:

- (a) its pension plans and Enrichment Corp.'s pension plans are at least 90% funded on a variable rate premium calculation in the current plan year;
- (b) its net income calculated in accordance with GAAP (excluding the effect of pension remeasurement) for the immediately preceding fiscal quarter exceeds \$7.5 million;
- (c) its free cash flow (defined as the sum of cash provided by (used in) operating activities and cash provided by (used in) investing activities) for the immediately preceding four fiscal quarters exceeds \$35 million;
- (d) the balance of cash and cash equivalents calculated in accordance with GAAP on the last day of the immediately preceding quarter would exceed \$150 million after pro forma application of the dividend payment; and
- (e) dividends may be legally paid under Delaware law.

Centrus has not met these criteria for the periods from issuance through December 31, 2019, and has not declared, accrued or paid dividends on the Series B Preferred Stock as of December 31, 2019. Dividends on the Series B Preferred Stock are cumulative to the extent not paid at any quarter-end, whether or not declared and whether or not there are assets of the Company legally available for the payment of such dividends in whole or in part. As of December 31, 2019, the Series B Preferred Stock has an aggregate liquidation preference of \$127.2 million including accumulated dividends of \$22.6 million. As of December 31, 2018, the Series B Preferred Stock had an aggregate liquidation preference of \$119.3 million, including accumulated dividends of \$14.7 million.

Outstanding shares of the Series B Senior Preferred Stock are redeemable at the Company's option, in whole or in part, for an amount of cash equal to the Liquidation Preference, plus an amount equal to the accrued and unpaid dividends, if any, whether or not declared, through date of redemption.

Rights Agreement

On April 6, 2016 (the "Effective Date"), the Company's Board of Directors (the "Board") adopted a Section 382 Rights Agreement, which was amended on February 14, 2017 to exclude acquisitions of the Series B Preferred Stock issued as part of the exchange offer and consent solicitation from the definition of "Common Shares" in connection with the settlement and completion of the exchange offer and consent solicitation (the "Rights Agreement"). The Board adopted the Rights Agreement in an effort to protect shareholder value by, among other things, attempting to protect against a possible limitation on the Company's ability to use its net operating loss carryforwards and other tax benefits, which may be used to reduce potential future income tax obligations.

In connection with the adoption of the Rights Agreement, the Board declared a dividend of one preferred-share-purchase-right for each share of the Company's Class A Common Stock and Class B Common Stock outstanding as of the Effective Date. The rights initially trade together with the common stock and are not exercisable. In the absence of further action by the Board, the rights would generally become exercisable and allow a holder to acquire shares of a new series of the Company's preferred stock if any person or group acquires 4.99% or more of the outstanding shares of the Company's common stock, or if a person or group that already owns 4.99% or more of the Company's Class A Common Stock acquires additional shares representing 0.5% or more of the outstanding shares of the Company's Class A Common Stock. The rights beneficially owned by the acquirer would become null and void, resulting in significant dilution in the ownership interest of such acquirer.

The Board may exempt any acquisition of the Company's common stock from the provisions of the Rights Agreement if it determines that doing so would not jeopardize or endanger the Company's use of its tax assets or is otherwise in the best interests of the Company. The Board also has the ability to amend or terminate the Rights Agreement prior to a triggering event.

On April 3, 2019, the Board approved and the Company entered into a Second Amendment to the Section 382 Rights Agreement (the "Second Amendment"), which amends the Rights Agreement. The Second Amendment, among other things, (i) decreased the purchase price for each one one-thousandth (1/1000th) of a share of the Company's Series A Participating Cumulative Preferred Stock, par value \$1.00 per share, from \$26.00 to \$18.00 and (ii) extended the Final Expiration Date (as defined in the Rights Agreement) from April 5, 2019 to April 5, 2022.

Shares Outstanding

Changes in the number of shares outstanding are as follows:

	Preferred Stock, Series B	Common Stock, Class A	Common Stock, Class B
Balance at December 31, 2017	104,574	7,632,669	1,406,082
Issuance of Class A Common Stock	—	398,638	—
Balance at December 31, 2018	104,574	8,031,307	1,406,082
Issuance of Class A Common Stock	—	27,500	—
Conversion of Common Stock from Class B to Class A	—	288,620	(288,620)
Balance at December 31, 2019	104,574	8,347,427	1,117,462

17. COMMITMENTS AND CONTINGENCIES

Commitments under SWU Purchase Agreements

TENEX

A major supplier of SWU to the Company is the Russian government entity TENEX, Joint-Stock Company (“TENEX”). Under a 2011 agreement with TENEX, as amended, (the “Russian Supply Agreement”), the Company purchases SWU contained in LEU received from TENEX, and the Company delivers natural uranium to TENEX for the LEU’s uranium component. The LEU that the Company obtains from TENEX under the agreement is subject to quotas and other restrictions applicable to commercial Russian LEU.

The Russian Supply Agreement was originally signed with commitments through 2022 but was modified in 2015 to give the Company the right to reschedule certain quantities of SWU of the original commitments into the period 2023 and beyond, in return for the purchase of additional SWU in those years. The Company has exercised this right to reschedule in each year through December 31, 2018. If the Company exercises this right to reschedule in full during the remaining years of the contract’s original term, the Company will have a rescheduled post-2022 purchase commitment through 2028.

The Russian Supply Agreement provides that the Company must pay for all SWU in its minimum purchase obligation each year, even if it fails to submit orders for such SWU. In such a case, the Company would pay for the SWU but have to take the unordered SWU in the following year.

Pricing terms for SWU under the Russian Supply Agreement are based on a combination of market-related price points and other factors. This formula was subject to an adjustment at the end of 2018 that reduced the unit costs of SWU under this contract in 2019 and for the duration of the contract.

Orano

On April 27, 2018, the Company entered into an agreement (the “Orano Supply Agreement”) with Orano Cycle (“Orano”) for the long-term supply to the Company of SWU contained in LEU, nominally commencing in 2023. Under the Orano Supply Agreement, the Company purchases SWU contained in LEU received from Orano, and the Company delivers natural uranium to Orano for the natural uranium feed material component of LEU. The Company may elect to begin to accept deliveries as early as 2021 or to defer the commencement of purchases until 2024 and has the option to extend the six-year purchase period for an additional two years. The Orano Supply Agreement provides significant flexibility to adjust purchase volumes, subject to annual minimums and maximums in fixed amounts that vary year by year. The pricing for the SWU purchased by the Company is determined by a

formula that uses a combination of market-related price points and other factors, and is subject to certain floors and ceilings. Prices are payable in a combination of U.S. dollars and euros.

Milestones Under the 2002 DOE-USEC Agreement

The Company and DOE signed an agreement dated June 17, 2002, as amended (the “2002 DOE-USEC Agreement”), pursuant to which the parties made long-term commitments directed at resolving issues related to the stability and security of the domestic uranium enrichment industry. DOE consented to the assumption by Centrus of the 2002 DOE-USEC Agreement and other agreements between the Company and DOE subject to an express reservation of all rights, remedies and defenses by DOE and the Company under those agreements. The 2002 DOE-USEC Agreement requires Centrus to develop, demonstrate and deploy advanced enrichment technology in accordance with milestones, including the deployment of a commercial American Centrifuge Plant, and provides for remedies in the event of a failure to meet a milestone under certain circumstances including terminating the 2002 DOE-USEC Agreement, revoking Centrus’ access to DOE’s centrifuge technology that is required for the success of the Company’s ongoing work with the American Centrifuge technology, requiring Centrus to transfer certain rights in the American Centrifuge technology and facilities to DOE, and requiring Centrus to reimburse DOE for certain costs associated with the American Centrifuge technology. The 2002 DOE-USEC Agreement provides that if a delaying event beyond the control and without the fault or negligence of Centrus occurs that could affect Centrus’ ability to meet the American Centrifuge Plant milestone under the 2002 DOE-USEC Agreement, DOE and the Company will jointly meet to discuss in good faith possible adjustments to the milestones as appropriate to accommodate the delaying event. The assumption of the 2002 DOE-USEC Agreement provided for in the plan of reorganization in the Company’s 2014 Chapter 11 bankruptcy (now completed) did not affect the ability of either party to assert all rights, remedies and defenses under the agreement and all such rights, remedies and defenses are specifically preserved and all-time limits tolled expressly including all rights, remedies and defenses and time limits relating to any missed milestones. DOE and the Company have agreed that all rights, remedies and defenses of the parties with respect to any missed milestones and all other matters under the 2002 DOE-USEC Agreement continue to be preserved, and that the time limits for each party to respond to any missed milestones continue to be tolled.

Legal Matters

From time to time, the Company is involved in various pending legal proceedings, including the pending legal proceedings described below.

On August 30, 2013, the Company submitted a claim to DOE under the Contract Disputes Act for payment of \$42.8 million, representing DOE’s share of pension and postretirement benefits costs related to the transition of Portsmouth site employees to DOE’s D&D contractor. On August 27, 2014, the DOE contracting officer denied the Company’s claim. As a result, the Company filed an appeal of the decision in the U.S. Court of Federal Claims in January 2015. Centrus believes that DOE is responsible for a significant portion of any pension and postretirement benefit costs associated with the transition of employees at Portsmouth. The receivable for DOE’s share of pension and postretirement benefits costs has a full valuation allowance due to the lack of a resolution with DOE and uncertainty regarding the amounts owed and the timing of collection. While proceeding with litigation, the Company is still pursuing settlement.

On May 26, 2019, the Company, Enrichment Corp., and five other DOE contractors who have operated facilities at the Portsmouth, Ohio, Gaseous Diffusion Plant site (including, in the case of the Company, the American Centrifuge Plant site located on the premises (the “Portsmouth GDP” site) were named as defendants in a class action complaint filed by Ursula McGlone, Jason McGlone, Julia Dunham, and K.D. and C.D., minor children by and through their parent and natural guardian Julia Dunham (collectively, the “McGlone Plaintiffs”) in the U.S. District Court in the Southern District of Ohio, Eastern Division. The complaint seeks damages for alleged off-site contamination allegedly resulting from activities on the Portsmouth GDP site. The McGlone Plaintiffs are seeking to represent a class of (i) all current or former residents within a seven-mile radius of the Portsmouth GDP site and (ii) all students and their parents at the Zahn’s Corner Middle School from 1993-present. The Company believes that its operations at the Portsmouth GDP site were fully in compliance with the Nuclear Regulatory Commission’s

regulations. Further the Company believes that any such liability should be covered by indemnification under the Price-Anderson Act. The Company and Enrichment Corp. have provided notifications to DOE required to invoke indemnification under the Price-Anderson Act and other contractual provisions.

On June 28, 2019, the Company, Enrichment Corp. and four other DOE contractors who have operated facilities at the Portsmouth GDP site were named as defendants in a class action complaint filed by Ray Pritchard and Sharon Melick (collectively, the “Pritchard Plaintiffs”) in the U.S. District Court in the Southern District of Ohio, Eastern Division. The complaint seeks damages for alleged off-site contamination allegedly resulting from activities on the Portsmouth GDP site. The Pritchard Plaintiffs are seeking to represent a class of all current or former residents within a seven-mile radius of the Portsmouth GDP site. The Company believes that its operations at the Portsmouth GDP site were fully in compliance with the Nuclear Regulatory Commission’s regulations. Further the Company believes that any such liability should be covered by indemnification under the Price-Anderson Act. The Company and Enrichment Corp. have provided notifications to DOE required to invoke indemnification under the Price-Anderson Act and other contractual provisions.

On November 27, 2019, the Company, Enrichment Corp. and six other DOE contractors who have operated facilities at the Portsmouth GDP site were named as defendants in a class action complaint filed by James Matthews, Jennifer Brownfield Clark, Joanne Ross, the Estate of A.R., and others similarly situated (the “Matthews Plaintiffs”), in the Common Pleas Court of Pike County, Ohio. The complaint seeks injunctive relief, compensatory damages, statutory damages, and any other relief allowed by law for alleged off-site contamination allegedly resulting from activities on the Portsmouth GDP site. The Matthews Plaintiffs expressly contend that the ongoing and continuous releases that injured the Plaintiffs and Class Members are not “nuclear incidents” as that term is defined in the Price-Anderson Act, but rather “freestanding state law claims concerning traditional-style state regulation.” The Company believes that its operations at the Portsmouth GDP site were fully in compliance with the Nuclear Regulatory Commission’s regulations. Further the Company believes that any such liability should be covered by indemnification under the Price-Anderson Act. The Company and Enrichment Corp. have provided notifications to DOE required to invoke indemnification under the Price-Anderson Act and other contractual provisions.

On October 11, 2018, the Company’s subsidiaries, Enrichment Corp. and American Centrifuge Enrichment, LLC (“ACE”, together with Enrichment Corp., the “Company Subsidiaries”) filed proofs of claim in the U.S. Bankruptcy Court for the Northern District of Ohio (the “Bankruptcy Court”) against each of FirstEnergy Nuclear Operating Company (“FENOC”), FirstEnergy Nuclear Generation, LLC (“FENG,” and together with FENOC, the “FirstEnergy Contract Parties”), FirstEnergy Solutions Corp. (“FES”) and FirstEnergy Generation, LLC (“FG”). The claims relate to damages arising from the rejection and breach of a long-term contract between the Company Subsidiaries and the FirstEnergy Contract Parties that was approved by the Bankruptcy Court and made effective as of July 26, 2018. The proofs of claim filed by the Company Subsidiaries include claims against the FirstEnergy Contract Parties based on their liability as parties to the contract that was rejected and breached. The proofs of claim filed by the Company Subsidiaries also include claims against FES and FG based on their liability under guaranties they issued that may obligate FES and FG to satisfy the rejection and breach of contract damages claims.

On November 15, 2019, FENOC, FENG, FES and FG (collectively, the “FirstEnergy Debtors”) filed objections to the Company Subsidiaries’ claims in the Bankruptcy Court. No decision on the claims has yet been reached by the Bankruptcy Court. The Company Subsidiaries and the FirstEnergy Debtors have submitted cross motions for summary judgment on the issue of whether the guaranties apply. On March 13, 2020, the Bankruptcy Court ruled in favor of the FirstEnergy Debtors on their motion, finding that the guaranties did not apply to the Company Subsidiaries’ claims. The Company is considering its appeal rights. The ruling does not apply to the Company Subsidiaries’ claims against the FirstEnergy Contract Parties.

Centrus is subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, other than the above, Centrus does not believe that the outcome of any of these legal matters, individually and in the aggregate, will have a material adverse effect on its cash flows, results of operations or consolidated financial condition.

18. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The sole component of accumulated other comprehensive income (loss) (“AOCI”) relates to activity in the accounting for pension and postretirement health and life benefit plans. The amortization of prior service costs (credits) are reclassified from AOCI and included in the computation of net periodic benefit cost. In 2019, the effect of pension plan changes related to lump sum payment options has been added to AOCI as an unrecognized prior service cost to be amortized over the average future service of active employees starting in 2020. For further details, refer to *Note 12, Pension and Postretirement Health and Life Benefits*.

19. REVENUE BY GEOGRAPHIC AREA, MAJOR CUSTOMERS AND SEGMENT INFORMATION

Revenue by customer location, including customers in a foreign country representing 10% or more of total revenue, follows (in millions):

	Year Ended December 31,	
	2019	2018
United States	\$ 152.4	\$ 141.3
Foreign:		
Japan	23.4	*
Belgium	21.5	35.2
Other	12.4	16.5
Total foreign	57.3	51.7
Total revenue	\$ 209.7	\$ 193.0

* less than 10%

In 2019, the Company’s 10 largest customers represented approximately 95% of total revenue and its three largest customers represented approximately 56% of total revenue. In the Company’s LEU segment, revenue from Florida Power and Light, Dominion Energy South Carolina, Tohoku Electric Power Company, Inc. and Synatom represented approximately 27%, 12%, 11%, 10%, respectively, of total revenue in 2019. In 2018, the Company’s 10 largest customers represented approximately 85% of total revenue and its three largest customers represented approximately 52% of total revenue. In the Company’s LEU segment, revenue from Florida Power and Light, Synatom, and South Carolina Electric & Gas represented approximately 21%, 18%, 13%, respectively, of total revenue in 2018. In the Company’s technical solutions segment, the U.S. government and its contractors represented approximately 19% of total revenue in 2019 and 12% in 2018, respectively. No other customer represented more than 10% of total revenue in 2019 or 2018.

Centrus has two reportable segments: the LEU segment with two components, SWU and uranium, and the technical solutions segment. The LEU segment includes sales of the SWU component of LEU, sales of both the SWU and uranium components of LEU, and sales of uranium. The technical solutions segment includes revenue and cost of sales for work that Centrus performs under the HALEU Contract. The technical solutions segment also includes limited services provided by Centrus to DOE and its contractors at the Piketon facility. Gross profit is Centrus’ measure for segment reporting. There were no intersegment sales in the periods presented.

The following table presents the Company's segment information (in millions):

	Year Ended December 31,	
	2019	2018
Revenue		
LEU segment:		
Separative work units	\$ 123.7	\$ 130.6
Uranium	45.7	33.8
Total	169.4	164.4
Technical solutions segment	40.3	28.6
Total revenue	\$ 209.7	\$ 193.0
Segment Gross Profit (Loss)		
LEU segment	\$ 50.8	\$ (23.3)
Technical solutions segment	(18.3)	5.4
Gross profit (loss)	\$ 32.5	\$ (17.9)

The Company's total assets are not presented for each reportable segment as they are not reviewed by, nor otherwise regularly provided to, the chief operating decision maker. Centrus' long-term or long-lived assets, which include property, plant and equipment and other assets reported on the consolidated balance sheet, were located in the United States as of December 31, 2019, and December 31, 2018.

20. QUARTERLY RESULTS OF OPERATIONS (Unaudited)

(in millions, except per share data)

	2019				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Revenue	\$ 38.7	\$ 10.6	\$ 104.7	\$ 55.7	\$ 209.7
Cost of sales	44.2	14.9	69.2	48.9	177.2
Gross profit (loss)	(5.5)	(4.3)	35.5	6.8	32.5
Advanced technology costs	6.6	5.1	1.3	1.6	14.6
Selling, general and administrative	8.1	7.7	8.7	9.2	33.7
Amortization of intangible assets	1.1	1.2	1.8	2.4	6.5
Special charges (credits) for workforce reductions	(0.1)	(2.9)	0.8	0.3	(1.9)
Gain on sales of assets	(0.4)	(0.1)	(0.2)	—	(0.7)
Operating income (loss)	(20.8)	(15.3)	23.1	(6.7)	(19.7)
Nonoperating components of net periodic benefit expense (income)	(0.1)	—	(0.1)	(4.1)	(4.3)
Interest expense	1.0	1.0	0.9	0.1	3.0
Investment income	(0.7)	(0.7)	(0.5)	(0.3)	(2.2)
Income tax (benefit) expense	(0.1)	—	—	0.4	0.3
Net income (loss)	\$ (20.9)	\$ (15.6)	\$ 22.8	\$ (2.8)	\$ (16.5)
Preferred stock dividends - undeclared and cumulative	2.0	2.0	1.9	1.9	7.8
Net income (loss) allocable to common stockholders	\$ (22.9)	\$ (17.6)	\$ 20.9	\$ (4.7)	\$ (24.3)
Net income (loss) per share:					
Basic	\$ (2.40)	\$ (1.84)	\$ 2.18	\$ (0.49)	\$ (2.54)
Diluted	\$ (2.40)	\$ (1.84)	\$ 2.17	\$ (0.49)	\$ (2.54)

	2018				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Revenue	\$ 35.7	\$ 39.4	\$ 34.1	\$ 83.8	\$ 193.0
Cost of sales	41.3	49.8	26.3	93.5	210.9
Gross profit (loss)	(5.6)	(10.4)	7.8	(9.7)	(17.9)
Advanced technology costs	7.7	5.7	5.8	6.9	26.1
Selling, general and administrative	11.2	9.7	8.8	10.2	39.9
Amortization of intangible assets	1.3	1.5	1.7	2.1	6.6
Special charges for workforce reductions and advisory costs	0.6	0.3	0.6	0.7	2.2
Gain on sales of assets	(0.1)	(0.2)	—	—	(0.3)
Operating loss	(26.3)	(27.4)	(9.1)	(29.6)	(92.4)
Gain on early extinguishment of debt	—	—	—	(0.5)	(0.5)
Nonoperating components of net periodic benefit expense (income)	(1.6)	(1.7)	(1.6)	15.5	10.6
Interest expense	1.0	1.0	1.0	1.1	4.1
Investment income	(0.6)	(0.6)	(0.7)	(0.6)	(2.5)
Income tax (benefit) expense	(0.1)	—	—	0.1	—
Net loss	\$ (25.0)	\$ (26.1)	\$ (7.8)	\$ (45.2)	\$ (104.1)
Preferred stock dividends - undeclared and cumulative	1.9	2.0	1.9	2.0	7.8
Net loss allocable to common stockholders	\$ (26.9)	\$ (28.1)	\$ (9.7)	\$ (47.2)	\$ (111.9)
Net loss per share - basic and diluted	\$ (2.97)	\$ (3.08)	\$ (1.06)	\$ (5.10)	\$ (12.23)

The calculation of net income (loss) per share on a dilutive basis is provided in Note 15, *Net Income (Loss) Per Share*. No dilutive effect is recognized in periods in which a net loss has occurred or in which the assumed conversion effect of options or convertible securities is anti-dilutive.

21. SUBSEQUENT EVENT

On March 11, 2020, the World Health Organization declared the novel strain of coronavirus (COVID-19) a global pandemic and recommended containment and mitigation measures worldwide. As of the date of this filing, our LEU segment operations have not been affected and we are working with our suppliers, fabricators and customers to monitor the situation closely. Furthermore, other than restrictions on a limited number of our employees at the Piketon, Ohio facility, our Technical Solutions segment operations, including the HALEU contract, have not been significantly affected. However, we cannot reasonably estimate the length or severity of this pandemic, or the extent to which the disruption may materially impact our consolidated financial position, consolidated results of operations, and consolidated cash flows in fiscal 2020.

CENTRUS ENERGY CORP.
DESCRIPTION OF SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934

The authorized capital stock of Centrus Energy Corp (the “Company,” “Centrus” or “us”) consists of (a) 100,000,000 shares of common stock, par value \$0.10 per share, of which 70,000,000 shares are classified as Class A Common Stock, and 30,000,000 shares are classified as Class B Common Stock, and (b) 20,000,000 shares of preferred stock, par value \$1.00 per share, of which 2,000,000 shares have been designated Series A Participating Cumulative Preferred Stock, and 104,547 shares of which have been designated Series B Senior Preferred Stock. The Class A Common Stock is registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, and trades on the NYSE American platform under the symbol “LEU.”

The following description of the terms of our securities is not complete and is qualified in its entirety by reference to the Company’s Amended and Restated Certificate of Incorporation (the “Certificate of Incorporation”), the Company’s Third Amended and Restated Bylaws (the “Bylaws”), and the Rights Agreement (as defined below), all of which are exhibits to our Annual Report on Form 10-K.

Class A Common Stock

The holders of Class A Common Stock are entitled to one vote for each outstanding share of Class A Common Stock owned by that stockholder on every matter properly submitted to the stockholders for their vote, except for any amendment for the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock or Class B Common Stock. Generally, all matters to be voted on by stockholders, other than the election of directors, must be approved by a majority in voting power of the stock represented and entitled to vote. However, questions governed expressly by provisions of the Certificate of Incorporation, bylaws, applicable stock exchange rules or applicable law require approval as set forth in the applicable governing document, stock exchange rule or law. The holders of Class B Common Stock are entitled to elect up to two directors, which right is subject to change based on certain holding requirements. Otherwise, the directors are elected by a plurality of votes cast on the election of directors.

Subject to the rights of the holders of any series of Preferred Stock outstanding at any time, the holders of Class A Common Stock and Class B Common Stock will be entitled share ratably, based upon the number of shares held, in such dividends and other distributions of cash or any other right or property as may be declared by the Board of Directors out of the assets or funds legally available for such dividends or distributions, with sharing equally in such dividends or distributions. The Company is not permitted to pay dividends on the Common Stock while any shares of Series B Preferred Stock are outstanding. The Company currently has shares of Series B Preferred Stock outstanding.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company’s affairs, holders of Class A Common Stock and Class B Common Stock would be entitled to share ratably, based upon the number of shares held, in assets that are legally available for distribution to stockholders after payment of liabilities. If there is any preferred stock outstanding at such time, holders of the preferred stock may be entitled to distribution and/or liquidation preferences. The Company currently has shares of Series B Preferred Stock outstanding with a liquidation preference.

The Certificate of Incorporation does not provides for any conversion, sinking fund, redemption, preference, preemptive right, or right of subscription for the Class A Common Stock. Issued and outstanding shares of Class B Common Stock convert into shares of Class A Common Stock upon transfer to a party other than the current Class B stockholders and their respective affiliates.

Provisions of the Company’s Certificate of Incorporation, Bylaws and Delaware Law that May Have an Anti-Takeover Effect

Certificate of Incorporation and Bylaws. The Certificate of Incorporation and Bylaws provide that a special meeting of stockholders may be called only by the Chairman, the President, the Board of Directors or a committee empowered by the Board of Directors to call a special meeting. Stockholders are not permitted to call, or to require that the Board of Directors call, a special meeting of stockholders.

In the event that levels of foreign ownership of the Company's stock established by the Certificate of Incorporation are exceeded, the Board of Directors has the right to take certain actions with respect to such ownership. These actions include requesting information from holders (or proposed holders) of the Company's securities, refusing to permit the transfer of securities by such holders, suspending or limiting voting rights of such holders, redeeming or exchanging shares of the Company's stock owned by such holders on terms set forth in the Certificate of Incorporation, and taking other actions that deemed necessary or appropriate to ensure compliance with the foreign ownership restrictions.

Delaware Takeover Statute. The Company is subject to Section 203 of the Delaware General Corporation Law (the "DGCL"), which, subject to certain exceptions, prohibits a Delaware corporation from engaging in any "business combination" (as defined below) with any "interested stockholder" (as defined below) for a period of three years following the date that such stockholder became an interested stockholder, unless: (i) prior to such date, the Board of Directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (ii) on consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) on or subsequent to such date, the business combination is approved by the Board of Directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 of the DGCL defines "business combination" to include: (i) any merger or consolidation involving the corporation and the interested stockholder; (ii) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder; (iii) subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; (iv) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or (v) the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation. In general, Section 203 of the DGCL defines an "interested stockholder" as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

Rights to Acquire Series A Participating Cumulative Preferred Stock

Centrus has adopted a Section 382 stockholders rights plan and declared a dividend distribution of one right for each outstanding share of our common stock to stockholders of record on April 6, 2016. Each right entitles its holder, under the circumstances described below, to purchase from us one one-thousandth of a share of our Series A Participating Cumulative Preferred Stock, par value \$1.00 per share, at an exercise price of \$18.00 per right, subject to adjustment. The terms of the rights are set forth in a Section 382 Rights Agreement between us, Computershare, Inc. and Computershare Trust Company, N.A., as amended (the "Rights Agreement").

The rights plan is intended to act as a deterrent to any person or group, together with its affiliates and associates, being or becoming the beneficial owner of 4.99% or more of common stock, with certain exceptions. The rights initially trade together with the common stock and are not exercisable. In the absence of further action by the Board, the rights would generally become exercisable and allow a holder to acquire shares of a new series of the Company's preferred stock if any person or group acquires 4.99% or more of the outstanding shares of the Company's common stock, or if a person or group that already owns 4.99% or more of the Company's Class A Common Stock acquires additional shares representing 0.5% or more of the outstanding shares of the Company's Class A Common Stock. The rights beneficially owned by the acquirer would become null and void, resulting in significant dilution in the ownership interest of such acquirer.

The Board may exempt any acquisition of the Company's common stock from the provisions of the Rights Agreement if it determines that doing so would not jeopardize or endanger the Company's use of its tax assets or is otherwise in the best interests of the Company. The Board also has the ability to amend or terminate the Rights Agreement prior to a triggering event. Unless earlier terminated or extended in accordance with the Rights Agreement, the rights issued under the Rights Agreement expire on April 5, 2022.

AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT

THIS AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT ("Amendment No. 1") dated November 28, 2018 is by and between Centrus Energy Corp., a Delaware corporation ("Centrus"), and Daniel B. Poneman, ("Executive"). Centrus and Executive shall collectively be referred to as the "Parties" and individually as a "Party."

WHEREAS, Centrus and Executive entered into an Employment Agreement effective as of March 6, 2015 (the "Agreement"), a copy of which is attached hereto as Exhibit A;

WHEREAS, Executive desires to receive and the Company desires to provide a portion of Executive's Annual Bonus in equity; and

WHEREAS, in accordance with paragraph 12.1 of the Agreement, the Parties desire to amend the Agreement to enable the Company to pay a portion of Executive's 2018 and subsequent annual bonuses in common stock.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants contained herein, the Parties hereby agree to the following:

1. Capitalized terms used and not defined in this Amendment No. 1 have the respective meanings assigned to them in the Agreement.
2. Section 1.7(a) of the Agreement is to be deleted in its entirety and replaced with the following:

"(a) Annual Bonus.

(i) Executive shall be eligible to participate in the Centrus Energy Corp. 2015 Performance Incentive Plan (or its successor) ("Annual Bonus Plan"), with an annual target bonus at least equal to 100% of Base Salary ("Annual Bonus"). The actual amount of the Annual Bonus awarded to Executive will be based on attainment of certain individual and corporate performance goals and targets determined by the Compensation Committee, after consultation with Executive, and the Compensation Committee's determination, in its sole discretion, whether and to what extent the applicable performance goals and targets have been achieved. The Annual Bonus may be more (up to 125% of Base Salary or such higher amount as the Compensation Committee may determine in the future) or less (as low as zero) than the target amount, as determined by the Compensation Committee in its sole discretion. The Annual Bonus will be paid at the same time annual bonuses are paid to other senior executives participating in the Annual Bonus Plan.

(ii) Except for the 2015 performance year, no minimum incentive is guaranteed. For the 2015 performance year, Executive will be entitled to a guaranteed Annual Bonus in the amount of \$625,000, which shall be paid in two installments. The first installment in the amount of \$312,500 will be paid on the next payroll date after the Effective Date ("First Installment") and, provided that Executive is employed on the payment date, the second installment in the amount of \$312,500 ("Second Installment") will be paid in calendar year 2016 when annual bonuses under the Annual Bonus Plan are (or would be, if approved by the Board's Compensation Committee) paid to other senior executives, but no later than March 15, 2016. If Executive is not employed by the Company on the payment date, Executive shall repay the full amount of the First Installment promptly and in any event within 10 days following Executive's termination of employment via personal or cashier's check.

(iii) Beginning as of the 2018 performance year, up to ten percent (10%) of the Annual Bonus awarded to Executive may be paid in fully vested shares of the Company's Class A common stock ("Common Stock") pursuant to the 2014 Equity Plan (as defined below), the applicable percentage to be determined by the Compensation Committee of the Company's Board of Directors in its sole discretion, subject to the terms and condition of the 2014 Equity Plan, applicable securities laws, and the exception described below. The number of shares to be awarded shall be determined by multiplying the Base Salary as of the beginning of the applicable performance year by the percentage of the Annual Bonus being paid in shares to obtain the cash value of the equity award and dividing the aforementioned cash value of the equity award by the Fair Market Value (as defined in the 2014 Equity Plan) of the Company's Common Stock on the date of issuance. The number of shares awarded will be rounded up or down to the nearest full share. Notwithstanding the preceding, in determining the applicable percentage the Compensation Committee shall not apply a percentage that would result in the issuance of more than 20,000 shares of Common Stock in any applicable performance year. Determinations by the Compensation Committee under this Section 1.7(a)(iii) shall be final, conclusive and binding upon all persons. The "2014 Equity Plan" shall mean and refer to that certain 2014 Equity Incentive Plan, as it may be amended from time to time (or a successor plan), as the case may be."

3. This Amendment No. 1 shall be effective as of November 28, 2018 (the "Amendment Effective Date"). Except as expressly provided in this Amendment No. 1, all of the terms and provisions of the Agreement are and will remain in full force and effect, and are hereby ratified and confirmed by the Parties. Without limiting the generality of the foregoing, the amendments contained herein will not be construed as an amendment to or waiver of any other provision of the Agreement or as a waiver of or consent to any further or future action on the part of either Party that would require the waiver or consent of the other Party. On and after the Amendment Effective Date, each reference in the Agreement to "this Agreement," "the Agreement," "hereunder," "hereof," "herein" or words of like import shall mean and be a reference to the Agreement as amended by this Amendment No. 1.
4. This Amendment No. 1 shall be governed by the laws of the State of Maryland.
5. This Amendment No. 1 may be executed in two or more counterparts, each of which shall for all purposes be deemed an original and all of which shall constitute one and the same instrument and shall become effective when one or more counterparts or electronic signatures have been executed by each of the Parties and delivered to the other Party, it being understood that all Parties need not sign the same counterpart or form of electronic signature.

[Signature Page Follows on Next Page]

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 1 through their duly authorized representatives as of the date first listed above.

Centrus Energy Corp.

Executive

By: /s/ Mikel H. Williams

By: /s/ Daniel B. Poneman

Name: Mikel H. Williams

Name: Daniel B. Poneman

Title: Chairman of the Board

Title: Executive

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DOE-J-1001 List of Attachments1

Section A - Contract Form

Section B - Supplies or Services/Prices

B.1 DOE-B-2012 Supplies/Services Being Procured/Delivery Requirements (Oct 2014) (Revised)

The Contractor shall furnish all personnel, facilities, equipment, material, supplies, and services (except as may be expressly set forth in this contract as furnished by the Government) and otherwise do all things necessary for, or incidental to, the performance of work as described in Section C, *Performance Work Statement (PWS)*.

B.2 Type of Contract

- (a) This is a performance-based contract that includes cost-reimbursement-no-fee contract line items (CLINs). While the CLIN and subCLIN amounts annotated below are estimated costs, the total Government Share of \$115,000,000 is considered to be a ceiling price on the Government's Share of the program.

- (b) The contract consists of the CLINs shown in Table B.2-1:

Table B.2-1. Contract CLIN Structure**

CLIN	Title	Total Estimated Cost	Estimated Cost	PWS Section
00001	EPC			Section C.1
00001.1	Design and Engineering			Section C.1
00001.2	Procurement			Section C.1
00001.3	Construction			Section C.1
00001.3.1	CTTF Refurbishment			Section C.1
00001.3.2	Cascade/BOP Construction			Section C.1 - Milestone 7
00001.3.3	Contaminated Equipment Installation			Section C.1
00001.3.4	Construction Commissioning			Section C.1
00001.3.5	Physical Security Modifications			Section C.1
00001.3.6	IST Support			Section C.1
00001.4	Project Management			Section C.1
00002	Manufacturing			Section C.1
00002.1	Machine Controls			Section C.2
00002.2	LSA			Section C.2
00002.3	USA			Section C.2
00002.4	Column			Section C.2
00002.5	Casing			Section C.2 - Milestone 3
00002.6	Rotor Balancing			Section C.2
00002.7	Other Parts			Section C.2
00002.8	Transportation			Section C.2 - Milestone 6b
00002.9	Project Management			Section C.2
00003	Plant Support and Cascade Startup/Operations			Section C.3
00003.1	Facility Preparation for Project			Section C.3
00003.2	Machine Assembly and Drying			Section C.3 - Milestone 8
00003.3	Machine Installation, Startup, IRR, ORR			Section C.3 - Milestones 9 and 10
00003.4	Operations			Section C.3 - Milestones 12 and 13
00003.5	Balance of Plant Operations			Section C.3
00003.6	Program Management			Section C.3
00004	Regulatory Support			Section C.4
00004.1	Licensing			Section C.4 - Milestones 1 and 11
00004.2	Safeguards and Security			Section C.4 - Milestone 5
00004.5	Program Management			
00005	Program Management			Section C.5- Milestones 2, 4 and 6a
00005.1	Program Management			
00006	Nuclear Safety			Section C.6
00006.1	ISA/NCS			Section C.6
00006.2	Program Management			Section C.6
Total DOE Cost		\$115,000,000		
Contractor Cost Share		\$47,279,327		
Additional Contractor Cost Share (Foregone Fee)		\$8,113,966		
Total Estimated Contract Value		** \$170,393,293		

* Individual CLIN estimated costs will be included in subsequent modification; however, no change will affect the Total DOE Cost, Contractor Cost Share, or Total Estimated Contract Value.

**This contract is subject to reopening pending receipt of audits of ACO currently in process by an auditing firm retained by DOE. Therefore, the parties agree that the Total Contract Estimated Value is subject to adjustment based on the results of subsequent audit reports and resolution of audit findings. Should there be no agreement between DOE and Contractor on the amount of the price adjustment, the Contracting Officer may make a unilateral determination and modify the Contract accordingly. Failure of Contractor and DOE to agree with such change and the resulting Total Contract Estimated Value shall be resolved in accordance with the Disputes Clause of the Contract.

B.3 ORO-B-1001 OBLIGATION OF FUNDS (COST-NO FEE) ALTERNATE I

Pursuant to the clause entitled "Limitation of Funds," \$35,000,000 is obligated and available for payment of allowable costs to be incurred from the effective date of this contract through the period estimated to end May 31, 2020.

B.4 DOE-B-1005 Deliverable Requirements - Cost Sharing (Revised)

(a) This is a cost sharing, no fee type of contract. In accordance with the clause at FAR 52.216-12, Cost-Sharing Contract-No Fee, the total estimated contract value and cost-sharing ratios are as follows:

Total Estimated Contract Value is \$170,393,293.

A minimum of 20% of the total allowable costs for this project shall be borne by the Contractor. The Government will reimburse the Contractor for up to 80% of the total allowable costs; however, under no circumstances shall the Government Share exceed \$115,000,000.

(b) In accordance with DOE Acquisition Guide 35.003, cost participation may be in various forms or combinations which include, but are not limited to cash outlays; real property, or interest therein, needed for the project; personal property or services; cost matching; foregone fee; or other in-kind participation. In-kind contributions will be valued based upon the requirements in the DOE Acquisition Guide. The Contractor's share shall not have been reimbursed by the Federal Government under any other agreement with the Federal Government, including but not limited to, contracts, subcontracts at any tier, work authorizations under a DOE lease, or financial assistance agreements.

(c) The Government Share will be paid to Contractor based on a percentage of allowable cost incurred each month (the "Payment Percentage"). The Payment Percentage is calculated based on the DOE Funding of \$115,000,000 divided by the Total Estimated Contract Value without foregone fixed fee. For the period June 1, 2019 through May 31, 2020, the Payment Percentage is 72%. The Payment Percentage shall be reviewed annually, beginning January 1, 2020, and adjusted, if necessary, based on the cost incurred to date, the estimate to complete the program, and payments made to date to ensure DOE funding is available throughout the contract period of performance. Notwithstanding the above, at contract completion or termination the Government shall pay 80% of allowable actual cost incurred plus foregone fixed fee and In-Kind Contribution value up to the Maximum Government Share of \$115,000,000.

B.5 Estimated Annual Contract Value

DOE expects to obligate funding to the contract according to the estimated annual contract value:

Table B.5-1. Estimated Annual Contract Value

Government Fiscal Year (GFY)	Estimated Cost
GFY 2019	\$35M
GFY 2020	\$40M
GFY 2021	\$40M

Funding for the Contract is subject to the appropriations of Congress. It is not guaranteed that the funding will be provided or obligated in the amounts stated. If DOE does not receive appropriated funds in accordance with the amounts shown in the table above, the amounts will be adjusted via modification to the contract.C-5

Section C - Description/Specifications

High Assay Low Enriched Uranium (HALEU) Demonstration Project

Project Objectives

The objective of the HALEU Demonstration Program is to demonstrate the capability to produce HALEU with existing US origin enrichment technology and provide DOE with HALEU for near term use in its research and development for the advancement of civilian nuclear energy and security, and other programmatic missions. While DOE will retain title to the HALEU produced, DOE is amenable to make it available to the Contractor for DOE R&D purposes. Title to UF₆ by-product (tails) from the HALEU enrichment process will be determined at a later date. This demonstration consists of the deployment of a 16 machine AC100M HALEU Cascade to be located at DOE's site in Piketon, Ohio, producing a 19.75% U²³⁵ enriched product by April 1, 2022. In order to fulfill these objectives, the Project will accomplish 14 defined Milestones. The Milestones to be completed by the Contractor are:

MILESTONE 1 - Rescind the License Amendment Request (License Number SNM-7003) to the Nuclear Regulatory Commission (NRC) for removal of enrichment as an authorized activity and for downgrade of licensed activities for the Lead Cascade by July 1, 2019. This activity is considered complete when the Contractor's letter is submitted to the NRC. **(Complete June 1, 2019)**

MILESTONE 2 - Re-establish required site services under the Memorandum of Agreement for the Supply of Services (Article 6, Section 6.1 of the GCEP Lease) by January 1, 2020. **(Complete June 1, 2019)**

MILESTONE 3 - Award Purchase Order for machine casings by October 31, 2019. (Completed October 22, 2019)

MILESTONE 4 - Re-establish vendor supply chain(s) of materials and equipment necessary for deployment and production of unobligated HALEU by June 1, 2020.

MILESTONE 5 - Re-constitute the security program to support possession of C-24 technology and assembly/installation/operation of the HALEU Cascade at the DOE leased facilities located in Piketon, Ohio by November 1, 2020.

- a) Obtain Security Plan approval from NRC.
- b) Modify and implement Security Plan procedures.
- c) Request security clearances for new personnel.
- d) "Stand up" Piketon facilities for possession of C-24 technology and assembly/installation/operation of the HALEU Cascade.

MILESTONE 6 - Deliver sub-assemblies for 16 AC100M machines (Drawing no. 1007800 Rev. 3) to the DOE leased facilities located in Piketon, Ohio:

- a) Transfer title of Contractor-owned machine components to DOE by December 1, 2019 or as mutually agreed by the parties.
- b) Initiate delivery of sub-assemblies for 16 AC100M machines to DOE leased facilities in Piketon, Ohio by December 31, 2020.

MILESTONE 7 - Complete reconstitution of HALEU Balance of Plant (BOP) and cascade infrastructure (e.g., utilities, controls, service module) by November 1, 2021.

MILESTONE 8 - Assemble and dry 16 AC100M machines for the HALEU cascade by November 1, 2021.

MILESTONE 9 - Install 16 AC100M machines for the HALEU cascade by December 1, 2021.

MILESTONE 10 - Complete operational readiness for operation of the HALEU Cascade on UF₆ gas by March 1, 2022.

MILESTONE 11 - Obtain an NRC license revision for the Combined License (COL) to support production of 19.75% U²³⁵ by March 1, 2022.

MILESTONE 12 - Initiate operation of the HALEU 16 AC100M machine cascade by March 1, 2022.

MILESTONE 13 Operate the HALEU Cascade on UF₆ and produce a nominal 19.75% 0.24% U²³⁵ Pinch Tube or P-10 sample(s) by December 31, 2021.

MILESTONE 14 - Operate the HALEU Cascade to produce a minimum of 200 Kg UF₆ HALEU and up to 600 Kg UF₆ of HALEU by June 1, 2022.

Program Scope

The Program will support the following major areas of activity and any other necessary activities to complete the Objectives and Milestones described in Section C.1.1:

- Engineering/Procurement/Construction (EPC) of the HALEU Cascade
- Manufacturing of the AC100M Components and Subassemblies
- Plant Support and Cascade Startup/Operations
- Regulatory Support
- HALEU Program Management
- Nuclear Safety Support

Each major activity area is described separately as follows:

C.1 Engineering/Procurement/Construction (EPC) of the HALEU Cascade

EPC activities will include all the engineering, procurement and construction associated with reconstituting the Balance of Plant (BOP) and cascade components and systems to support the HALEU Cascade at Piketon, Ohio, including the vacuum, air, chilled water, and electrical systems and associated instrumentation and controls; the emergency power system; the distributed control system; the feed and withdrawal modules; the mass spectrometer, and the service module. Included also, are CTTF refurbishment; vent monitoring and centrifuge conditioning systems; and physical security modifications. Construction commissioning and Integrated System Test support is included. Also included is Program management of the EPC activities.

C.2 Manufacturing (AC100M Components and Subassemblies)

Manufacturing activities will include all associated procurement and manufacturing of machine parts, components and subassemblies of the AC100M machines for the HALEU cascade, including the machine controls, upper and lower suspension, column, casing, and rotors (including balancing). Transportation of the manufactured items to Piketon, Ohio is included as well as program management of the Manufacturing activities.

C.3 Plant Support and Cascade Startup/Operations

Plant Support activities include all preparation of the facility for installation of the HALEU 16-machine cascade, assembly and drying of the AC100M centrifuges, and installation and tie-ins of the machines to complete the HALEU cascade configuration. Cascade Startup/Operation activities include the Internal Readiness Review, the Operational Readiness Review, cascade startup and operation (including maintenance), and production of the nominal 19.75% U²³⁵ sample, a minimum of 200 Kg UF₆ HALEU and up to 600 Kg UF₆ HALEU. Maintain and operate Balance of Plant (BOP) facilities. Also included is program management of the activities.

C.4 Regulatory Support

Regulatory Support activities include NRC licensing, safeguards and security, and permitting. Also included is program management of the activities.

C.5 HALEU Program Management

Program Management will provide overall project direction of all activities and participants and management of the project including establishing a project Work Breakdown Structure (WBS) and baseline against which, performance will be measured using an earned value management system. The Contractor shall develop and provide a WBS that aligns with Contractor activities sequencing and execution of the HALEU Demonstration Program. Also, the Contractor shall develop and provide an integrated logic driven critical path schedule reflecting the WBS and which identifies contract milestones and deliverables. Formal status reports and meetings will be provided and held monthly with DOE to report and discuss schedule progress, milestone performance, cost performance, any variances, any concerns, and to identify action items. The Contractor will develop an agenda for these meetings and submit it to DOE at least seven (7) calendar days prior to the meeting. The formal status report is to be submitted at least three (3) business days prior to the meeting. The meeting date and the location will be mutually agreed upon between the Contractor and DOE. In addition, reports will be prepared and submitted to DOE to provide evidence of completion of project milestones. In addition, a weekly highlights report shall be provided electronically. Ad hoc meetings or conversations with DOE outside any formal meetings are to be utilized in a timely manner to identify and address any potential problems and concerns. Program Management will conduct activities that reduce overall risk to the program and assure a robust quality assurance program is implemented across the program.

C.6 Nuclear Safety Support

The Nuclear Safety Support involves the work related to the restoration of Piketon nuclear safety/nuclear criticality safety programs and processes. This includes the revision of parts of the Integrated Safety Analysis Summary (ISA) and Addendum 1, ISA supporting documentation, and nuclear criticality safety analysis and associated documentation. Also included is program management of the activities.

American Centrifuge Operating, LLC (ACO) utilizes a fully integrated Earned Value Management System (EVMS) in the execution of capital projects. ANSI/EIA-748-B Earned Value Management Systems and the GAO Cost Estimating and Assessment Guide serve as the basis for the ACO EVM System.

The system includes: Primavera P6 as the scheduling platform, Project Management Cost Processor (PMCP) as the cost processing, reporting and change control platform, Primavera Risk as the probabilistic risk analysis platform, and Oracle as the corporate financial system.

Major components of the system include:

- Integrated scope, cost and schedule Performance Measurement Baselines (PMB)
- Critical Path Methodology (CPM) used in evaluating schedule performance
- Probabilistic Risk Assessment (PRA) used in calculating project risks
- Formal change control process for both baselines and forecasts
- Monthly re-forecasting of project TEC and schedule

The EVM System and Project Controls are implemented and controlled at the corporate level of ACO and Centrus Energy Corp. ensuring continuity and consistency of its application across all projects in the Contractor's project portfolio.

C.6 Special Conditions

1. The Contractor will provide the U.S.-origin UF₆ feed stock for production of the nominal 19.75% U²³⁵ material identified in Milestone 14. Title to UF₆ by-product (tails) from the HALEU enrichment process will be determined at a later date.
2. In the performance of this Contract, the Contractor will abide by all conditions and requirements included in the Access Permit No. 11-04: AC Operating, which includes any approved revisions. In the event that any requirements in the Contract conflict with the Access Permit, the Contractor shall comply with the Access Permit and immediately notify the Contracting Officer.
3. The requirement for balance stand refurbishment is not included in this HALEU contract and is subject to DOE funding.
4. The Contractor will provide evidence of certification of unobligated U.S. source fiber vendor(s) to be used in the AC100M. The requirement for domestic fiber qualification is not included in this HALEU contract and is subject to DOE funding. Note: unobligated source fiber is not a requirement for this demonstration project.
5. Any incremental additional cost associated with transition to a secure facility prior to November 1, 2020 will be included as Contractor cost share. In addition, the Contractor shall obtain DOE approval prior to introducing uranium material to the Piketon site.
6. The Contractor is the sublessee of the Lease Agreement Between DOE and the United States Enrichment Corporation dated December 7, 2006 (GCEP Lease). DOE has agreed that the Lessee has satisfied the GCEP Lease turnover conditions, except for one compressor which will be made operable as identified in Condition Reports for X-6000 and X-3001. In no event will the Contractor charge to this Contract, whether as a direct or indirect charge, or as a credit for cost share, any costs associated with labor, equipment, supplies or any other costs required for the Lessee to comply with the Lease turnover requirements, nor shall the Contractor charge this Contract, whether as a director or indirect charge, or as a credit for cost share, for any services required prior to fulfillment of these turnover requirements that would not otherwise have been necessary.
7. The Contractor shall immediately notify DOE of any security or safety notifications that are made to the Nuclear Regulatory Commission.

Section D - Packaging and Marking

D.1 DOE-D-2001 Packaging and Marking (Oct 2014)

- (a) Preservation, packaging and packing for shipment, and mailing of all work delivered hereunder shall be in accordance with good commercial practice and adequate to insure acceptance by common carrier and safe transportation at the most economical rate(s), including electronic means.
- (b) Each package, report, or other deliverable shall be accompanied by a letter or other document which:
 - (1) Identifies the contract by number pursuant to which the item is being delivered;
 - (2) Identifies the deliverable item number or report requirement which requires the delivered item; and
 - (3) Indicates whether the Contractor considers the delivered item to be a partial or full satisfaction of the requirement.
- (c) For any package, report, or other deliverable being delivered to a party other than the Contracting Officer, a copy of the document required by paragraph (b) shall be simultaneously delivered to the office administering this contract as identified in Section G of the contract or, if none, to the Contracting Officer.

D.2 Security Requirements

The Contractor shall comply with the security requirements for packaging, marking, mailing, and shipping classified materials (if any) as prescribed by applicable NRC regulations, specifically the *Standard Practice Procedures Plan: Standard Format and Common Set of Requirements for the Protection of Classified Matter for USEC Inc. and Its Limited Liability Companies Regulated by the U.S. Nuclear Regulatory Commission, dated March 2011 (as agreed upon by DOE and NRC)*.E-3

Section E - Inspection and Acceptance

E.1 FAR 52.246-3, Inspection of Supplies - Cost-Reimbursement (May 2001)

(a) Definitions. As used in this clause,

“Contractor’s managerial personnel” means any of the Contractor’s directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of:

- (1) All or substantially all of the Contractor’s business;
- (2) All or substantially all of the Contractor’s operation at a plant or separate location where the Contract is being performed; or
- (3) A separate and complete major industrial operation connected with performing this Contract.

“Supplies” include but is not limited to raw materials, components, intermediate assemblies, end products, lots of supplies, and, when the Contract does not include the Warranty of Data clause, data.

- (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the supplies, fabricating methods, and special tooling under this Contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during Contract performance and for as long afterwards as the Contract requires.
- (c) The Government has the right to inspect and test the Contract supplies, to the extent practicable at all places and times, including the period of manufacture, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in the Contract performance. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.
- (e) Unless otherwise specified in the Contract, the Government shall accept supplies as promptly as practicable after delivery, and supplies shall be deemed accepted 60 days after delivery, unless accepted earlier.
- (f) At any time during Contract performance, but no later than six (6) months (or such other time as may be specified in the Contract) after acceptance of the supplies to be delivered under the Contract, the Government may require the Contractor to replace or correct any supplies that are nonconforming at time of delivery. Supplies are nonconforming when they are defective in material or workmanship or are otherwise not in conformity with Contract requirements. Except as otherwise provided in paragraph (h) of this clause, the cost of replacement or correction shall be included in allowable cost, determined as provided in the Allowable Cost and Payment clause, but no additional fee shall be paid. The Contractor shall not tender for acceptance supplies required to be replaced or corrected without disclosing the former requirement for replacement or correction and, when required, shall disclose the corrective action taken.

(g)

- (1) If the Contractor fails to proceed with reasonable promptness to perform required

replacement or correction, the Government may:

- (i) By Contract or otherwise, perform the replacement or correction and charge to the Contractor any increased cost, or make an equitable reduction in any fixed fee paid or payable under the Contract;
 - (ii) Require delivery of undelivered supplies at an equitable reduction in any fixed fee paid or payable under the Contract; or
 - (iii) Terminate the Contract for default.
- (2) Failure to agree on the amount of increased cost to be charged to the Contractor or to the reduction in the fixed fee shall be a dispute.
- (h) Notwithstanding paragraphs (f) and (g) of this clause, the Government may, at any time, require the Contractor to correct or replace, without cost to the Government, nonconforming supplies, if the non-conformances are due to:
- (1) Fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel; or
 - (2) The conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.
- (i) This clause applies in the same manner to corrected or replacement supplies as to supplies originally delivered.
- (j) The Contractor shall have no obligation or liability under this Contract to replace supplies that were nonconforming at the time of delivery, except as provided in this clause or as may be otherwise provided in the Contract.
- (k) Except as otherwise specified in the Contract, the Contractor's obligation to correct or replace Government furnished property shall be governed by the clause pertaining to Government property.

E2 FAR 52.246-5, Inspection of Services - Cost Reimbursement (Apr 1984)

- (a) Definition. "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.
- (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this Contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during Contract performance and for as long afterwards as the Contract requires.
- (c) The Government has the right to inspect and test all services called for by the Contract, to the extent practicable, at all places and times during the term of the Contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If any of the services performed do not conform with Contract requirements, the Government may require the Contractor to perform the services again, in conformity with Contract requirements, for no additional fee. When the defects in services cannot be corrected by re-performance, the Government may:
- (1) Require the Contractor to take necessary action to ensure that future performance conforms to Contract requirements; and

(2) Reduce any fee payable under the Contract to reflect the reduced value of the services performed.

(e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with Contract requirements, the Government may:

(1) By Contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances; or

(2) Terminate the Contract for default. F-2

Section F - Deliveries or Performance

F.1 DOE-F-1001 Delivery Schedule

The Government requires delivery to be made according to the following schedule:

Nothing contained in this Contract is intended to, or shall be interpreted to change, modify, alter or otherwise relieve any requirements or terms of the GCEP Lease.

MILESTONE	Title	Date
00001	Rescind the NRC Lead Cascade License Amendment	July 1, 2019
00002	Reestablish Site Services to support the HALEU Program at Piketon	January 1, 2020
00003a	Award Sub-Contract to Procure Machine Casings	October 31, 2019
00003b	Receive all Machine Casings	September 1, 2020
00004	Reestablish the Vendor Supply Chain to Support the HALEU Program	June 1, 2020
00005a,b,c,d	Reconstitute the Security Program for the Piketon Facilities	November 1, 2020
00006a	Transfer Title of Contractor-Owned Machine Components to DOE	December 1, 2019 or mutually agreed upon date
00006b	Initiate delivery of AC100M Subassemblies to Piketon	December 31, 2020
00007	Complete Reconstitution of HALEU BOP and Cascade Infrastructure	November 1, 2021
00008	Assemble and Dry 16 AC100M Machines	November 1, 2021
00009	Install 16 AC100M Machine in the HALEU Cascade	December 1, 2021
00010	Complete Operational Readiness for the HALEU Cascade	March 1,2022
00011	Obtain NRC License Revision for COL	March 1, 2022
00012	Initiate Operation of the HALEU Cascade	March 1, 2022
00013	Operate the HALEU Cascade and Produce 19.75% Sample	By March 15, 2022
00014	Operate the HALEU Cascade and Produce a minimum of 200 Kg of UF ₆ HALEU and up to 600 Kg UF ₆ HALEU.	By June 1, 2022

F.2 DOE-F-1002 Place of Performance - Services

The services specified by this contract shall be performed at the following location (s): Contractor's Facilities and the DOE Site in Piketon, Ohio.

F.3 52.242-15 Stop-Work Order (Aug. 1989) Alternate I (Apr 1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to

the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either --

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected and the contract shall be modified, in writing, accordingly, if --

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

Section G - Contract Administration Data

G.1 DOE-G-2001 Contracting Officer Authority (Oct 2014)

The Contracting Officer is responsible for administration of the contract. The Contracting Officer may appoint a Contracting Officer's Representative (COR), in accordance with the clause entitled Contracting Officer's Representative, to perform specifically delegated functions. The Contracting Officer is the only individual who has the authority on behalf of the Government, among other things, to take the following actions under the contract:

- (a) Assign additional work within the general scope of the contract.
- (b) Issue a change in accordance with the clause entitled Changes.
- (c) Change the cost or price of the contract.
- (d) Change any of the terms, conditions, specifications, or services required by the contract.
- (e) Accept non-conforming work.
- (f) Waive any requirement of the contract.

G.2 DOE-G-2002 Contracting Officer's Representative (Oct 2014)

Pursuant to the clause at DEAR 952.242-70 entitled *Technical Direction*, the Contracting Officer shall designate in writing a COR for this contract, and provide a copy of such designation to the Contractor, including the delegated responsibilities and functions. The COR does not have authority to perform those functions reserved exclusively for the Contracting Officer.

G.3 DOE-G-2003 Contractor's Program Manager (Oct 2014)

- (a) The Contractor shall designate a Program Manager who will be the Contractor's authorized supervisor for technical and administrative performance of all work hereunder. The Program Manager shall be the primary point of contact between the Contractor and the COR under this contract.
- (b) The Program Manager shall receive and execute, on behalf of the Contractor, such technical directions as the COR may issue within the terms and conditions of the contract.

G.4 DOE-G-2004 Contract Administration (Oct 2014)

To promote timely and effective contract administration, correspondence delivered to the Government under this contract shall reference the contract number, title, and subject matter and shall be subject to the following procedures:

- (a) Technical correspondence. Technical correspondence shall be addressed to the COR for this contract, and a copy of any such correspondence shall be sent to the U.S. Department of Energy (DOE) Contracting Officer. As used herein, technical correspondence does not include correspondence where patent or rights in data issues are involved, nor technical correspondence that proposes or involves waivers, deviations, or modifications to the requirements, terms, or conditions of this contract.
- (b) Other Correspondence.
 - (1) Correspondence regarding patent or rights in data issues should be sent to the Intellectual Property Counsel. A copy of such correspondence shall also be provided to the Contracting Officer.

(2) If no Government Contract Administration Office is designated on Standard Form 33 (Block 24), all correspondence, other than technical correspondence and correspondence regarding patent of rights in data, including correspondence regarding waivers, deviations, or modifications to requirements, terms, or conditions of the contract, shall be addressed to the Contracting Officer. Copies of all such correspondence shall also be provided to the COR.

(3) Where a Government Contract Administration Office, other than DOE, is designated on either Standard Form 33 (Block 24) or Standard Form 26 (Block 6) of this contract, all correspondence, other than technical correspondence, shall be addressed to the Government Contract Administration Office so designated, with copies of the correspondence to the Contracting Officer and the COR.

(c) Information regarding correspondence addresses and contact information will be provided through official correspondence:

Contracting Officer
U.S. Department of Energy
Attn: Karen Shears
Telephone number: 865-241-6411

Address:
200 Administration Road
Oak Ridge, TN 37830
Email address: Karen.Shears@orem.doe.gov

Contracting Officer's Representative
U.S. Department of Energy
Nuclear Energy Headquarters Office
Attn: TBD
Telephone number: TBD

Address:
200 Administration Road
Oak Ridge, TN 37830
Email address: [TBD]

Assistant Chief Counsel for Intellectual Property for the Office of Chief Counsel
Telephone number: (865) 576-1077

Address:
Department of Energy
P.O. Box 2001
Oak Ridge, TN 37831-2001
Email address: Emily.Schneider@Science.doe.gov

G.5 DOE-G-2005 Billing Instructions - Alternate I (Oct 2014) (Revised)

(a) Contractors shall use Standard Form 1034, Public Voucher for Purchases and Services Other than Personal, when requesting payment for work performed under the contract. Vouchers for payment shall be submitted timely in accordance with FAR 52.216-7(a)(1). All invoices shall be supported by a billing schedule summarized by funding source.

(b) Contractors shall submit vouchers electronically through the Oak Ridge Financial Service Center's Vendor Inquiry Payment Electronic Reporting System (VIPERS). VIPERS allows vendors to submit vouchers, attach supporting documentation, and check the payment status of any voucher submitted to the DOE. Instructions concerning contractor enrollment and use of VIPERS can be found at <https://vipers.doe.gov>.

(c) A paper copy of a voucher that has been submitted electronically will not be accepted.

(d) The voucher must include a statement of cost and supporting documentation for services rendered. This statement should include, as a minimum, a breakout by cost or price element of all services actually provided by the Contractor, both for the current billing period and cumulatively for the entire contract at the CLIN level (WBS level 2).

(1) Statement of Cost. The Contractor shall prepare and submit a Statement of Cost with each voucher in accordance with the following:

(i) Statement of Cost must be completed and consistent with data in the Contractor's cost accounting system.

(ii) Costs claimed must be only those recorded costs authorized for billing by the payment provisions of the contract.

(iii) Indirect costs claimed must reflect the rates approved for billing purposes by the Contracting Officer.

(iv) The Direct Productive Labor Hours (DPLH) incurred during the current billing period must be shown, and the DPLH summary completed, if applicable.

(v) Costs claimed must be summarized and broken out by cost element (e.g., Labor, Subcontracts, Other Direct Costs, etc.).

(vi) Statement of Cost must show total amounts by current billing period, fiscal year to date, and cumulative contract-to-date to facilitate reconciliation of invoiced costs.

(vii) Detailed invoice transactions must be provided in Microsoft Excel® format as a supplemental file including labor hours from the timekeeping system, purchase card transactions, subcontract costs, etc. The detailed invoice transaction data in Excel® format shall include sufficient data fields and detail as deemed necessary by DOE to enable sorting, analyzing, and testing of invoiced costs.

(2) The Contractor shall prepare and submit the supporting documentation with each voucher in accordance with the following:

(i) Direct costs (e.g., labor, equipment, travel, supplies, etc.) claimed for reimbursement on the Statement of Cost must be adequately supported. The level of detail provided must clearly indicate where the funds were expended. For example, support for labor costs must include the labor category (e.g., program manager, senior engineer, technician, etc.), the hourly rate, the labor cost per category, and any claimed overtime; equipment costs must be supported by a list of the equipment purchased, along with the item's cost; supporting data for travel must include the destination of the trip, number and labor category of travelers, transportation costs, per diem costs, and purpose of the trip; and supplies should be categorized by the nature of the items (e.g., office, lab, computer, etc.) and the dollar amount per category.

(ii) Any cost sharing or in-kind contributions incurred by the Contractor and/or third party during the billing period must be included. Cost-sharing or in-kind contributions committed under the contract shall be provided in the same format as paragraph (d) of this clause.

- (iii) Indirect rates used for billings must be clearly indicated, as well as their basis of application. When the cognizant Contracting Officer, Administrative Contracting Officer, or auditor approves a change in the billing rates, include a copy of the approval.
- (iv) All claimed subcontractor costs must be supported by submitting the same detail as outlined herein.

G.6 DOE-G-2007 Contractor Performance Assessment Reporting (Oct 2014) (Revised)

(a) The Contracting Officer will document the Contractor's performance under this contract (including any task orders placed against it, if applicable) by using the Contractor Performance Assessment Reporting System (CPARS). The CPARS information is handled as "Source Selection Information." Performance assessments entered into CPARS by the Contracting Officer are transmitted to the Past Performance Information Retrieval System (PPIRS), which is maintained by the Department of Defense. Information in PPIRS is available to authorized Government personnel seeking past performance information when evaluating proposals for award.

(b) Contractor performance will be evaluated at least annually at the contract or task order level, as determined by the Contracting Officer. Evaluation categories may include any or all of the following at the Government's discretion: (1) Quality, (2) Schedule, (3) Cost Control, (4) Management, (5) Utilization of Small Business, (6) Regulatory Compliance, and (7) Other Areas. PPIRS information is available at <http://www.ppirs.gov>, and CPARS information is available at <http://www.cpars.gov>. It is recommended that the Contractor take the overview training that can be found on the CPARS website. The Contractor shall adhere to the process and associated timeline found in the current version of the User Manual for CPARS and respond to such requests within fourteen (14) calendar days of the request.

(d) In addition to the performance assessments addressed above, the Government will perform other performance assessments necessary for administration of the contract in accordance with other applicable clauses in this contract.

G.7 DOE-G-2008 Non-Supervision of Contractor Employees (Oct 2014)

The Government shall not exercise any supervision or control over Contractor employees performing services under this contract. The Contractor's employees shall be held accountable solely to the Contractor's management, who in turn is responsible for contract performance to the Government.H-23

Section H - Special Contract Requirements

H.1 DOE-H-2014 Contractor Acceptance of Notices of Violation or Alleged Violations, Fines, and Penalties (Oct 2014)

(a) The Contractor shall accept, in its own name, notices of violation(s) or alleged violations (NOVs/NOAVs) issued by federal or state regulators to the Contractor resulting from the Contractor's performance of work under this Contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to other provisions of this contract.

(b) After providing DOE advance written notice, the Contractor shall conduct negotiations with regulators regarding NOVs/NOAVs and fines and penalties. However, the Contractor shall not make any commitments or offers to regulators that would bind the Government, including monetary obligations, without first obtaining written approval from the CO. Failure to obtain advance written approval may result in otherwise allowable costs being declared unallowable and/or the Contractor being liable for any excess costs to the Government associated with or resulting from such offers/commitments.

(c) The Contractor shall notify DOE promptly when it receives service from the regulators of NOVs/NOAVs and fines and penalties.

H.2 DOE-H-2023 Cost Estimating System Requirements (Oct 2014)

(a) Definitions.

"Acceptable estimating system" means an estimating system that complies with the system criteria in paragraph (d) of this clause, and provides for a system that:

- (1) Is maintained, reliable, and consistently applied;
- (2) Produces verifiable, supportable, documented, and timely cost estimates that are an acceptable basis for negotiation of fair and reasonable prices;
- (3) Is consistent with and integrated with the Contractor's related management systems; and
- (4) Is subject to applicable financial control systems.

"Estimating system" means the Contractor's policies, procedures, and practices for budgeting and planning controls, and generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards or contract modifications. Estimating system includes the Contractor's:

- (1) Organizational structure;
- (2) Established lines of authority, duties, and responsibilities;
- (3) Internal controls and managerial reviews;
- (4) Flow of work, coordination, and communication; and
- (5) Budgeting, planning, estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.

"Significant deficiency" means a shortcoming in the system that materially affects the ability of officials of the DOE to rely upon information produced by the system that is needed for management purposes.

(b) General. The Contractor shall establish, maintain, and comply with an acceptable estimating system.

- (c) Applicability. Paragraphs (d) and (e) of this clause apply if the Contractor is a large business to include a Contractor teaming arrangement, as defined at 48 CFR 9.601(1), performing a Contract in support of a Capital Asset Project (other than a management and operating contract as described at 48 CFR 917.6), as prescribed in DOE Order (DOE O) 413.3B or current version; or a non-capital asset project and either:
- (1) The total prime contract value exceeds \$50 million, including options; or
 - (2) The Contractor was notified, in writing, by the CO that paragraphs (d) and (e) of this clause apply.
- (d) System requirements.
- (1) The Contractor shall disclose its estimating system to the CO, in writing. If the Contractor wishes the Government to protect the information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission. If the Contractor plans to adopt the existing system from the previous contractor, the Contractor is responsible for the system and shall comply with the system requirements required in this clause.
 - (2) An estimating system disclosure is acceptable when the Contractor has provided the CO with documentation no later than 60 days after contract award that:
 - (i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and
 - (ii) Provides sufficient detail for the Government to reasonably make an informed judgment regarding the acceptability of the Contractor's estimating practices.
 - (3) The Contractor shall:
 - (i) Comply with its disclosed estimating system; and
 - (ii) Disclose significant changes to the cost estimating system to the CO on a timely basis.
 - (4) The Contractor's estimating system shall provide for the use of appropriate source data, utilize sound estimating techniques and good judgment, maintain a consistent approach, and adhere to established policies and procedures. An acceptable estimating system shall accomplish the following functions:
 - (i) Establish clear responsibility for preparation, review, and approval of cost estimates and budgets.
 - (ii) Provide a written description of the organization and duties of the personnel responsible for preparing, reviewing, and approving cost estimates and budgets.
 - (iii) Ensure that relevant personnel have sufficient training, experience, and guidance to perform estimating and budgeting tasks in accordance with the Contractor's established procedures.
 - (iv) Identify and document the sources of data and the estimating methods and rationale used in developing cost estimates and budgets.
 - (v) Provide for adequate supervision throughout the estimating and budgeting process.
 - (vi) Provide for consistent application of estimating and budgeting techniques.
 - (vii) Provide for detection and timely correction of errors.
 - (viii) Protect against cost duplication and omissions.
 - (ix) Provide for the use of historical experience, including historical vendor pricing information, where appropriate.
 - (x) Require use of appropriate analytical methods.
 - (xi) Integrate information available from other management systems.
 - (xii) Require management review, including verification of compliance with the company's estimating and budgeting policies, procedures, and practices.
 - (xiii) Provide for internal review of, and accountability for, the acceptability of the estimating system, including the budgetary data supporting indirect cost estimates and comparisons of projected results to actual results, and an analysis of any differences.
 - (xiv) Provide procedures to update cost estimates and notify the CO in a timely manner.
 - (xv) Provide procedures that ensure subcontract prices are reasonable based on a documented review and analysis provided with the prime proposal, when practicable.

- (xvi) Provide estimating and budgeting practices that consistently generate sound proposals that are compliant with the provisions of the solicitation and are adequate to serve as a basis to reach a fair and reasonable price.
 - (xvii) Have an adequate system description, including policies, procedures, and estimating and budgeting practices, that comply with the Federal Acquisition Regulation (48 CFR chapter 1) and DEAR (48 CFR chapter 9).
- (e) Significant deficiencies.
- (1) The CO will provide an initial determination to the Contractor, in writing, of any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.
 - (2) The Contractor shall respond within 30 days to a written initial determination from the CO that identifies significant deficiencies in the Contractor's estimating system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.
 - (3) The CO will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the CO's final determination concerning:
 - (i) Remaining significant deficiencies;
 - (ii) The adequacy of any proposed or completed corrective action; and
 - (iii) System disapproval, if the CO determines that one or more significant deficiencies remain.
- (f) If the Contractor receives the CO's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.
- (g) Withholding payments. If the CO makes a final determination to disapprove the Contractor's estimating system, and the contract includes the Section H clause entitled *Contractor Business Systems*, the CO will withhold payments in accordance with that clause.

H.3 DOE-H-2025 ACCOUNTING SYSTEM ADMINISTRATION (OCT 2014) (Revised)

(a) Definitions. As used in this clause--

(1) Acceptable accounting system means a system that complies with the system criteria in paragraph (c) of this clause to provide reasonable assurance that--

(i) Applicable laws and regulations are complied with;

(ii) The accounting system and cost data are reliable;

(iii) Risk of misallocations and mischarges are minimized; and

(iv) Contract allocations and charges are consistent with billing procedures.

(2) Accounting system means the Contractor's system or systems for accounting methods, procedures, and controls established to gather, record, classify, analyze, summarize, interpret, and present accurate and timely financial data for reporting in compliance with applicable laws, regulations, and management decisions, and may include subsystems for specific areas such as indirect and other direct costs, compensation, billing, labor, and general information technology.

(3) Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.

(b) General. The Contractor shall establish and maintain an acceptable accounting system. The Contractor shall provide in writing to the Contracting Officer documentation that its accounting system meets the system criteria in paragraph (c) of this clause no later than 60 days after contract award. Failure to maintain an acceptable accounting system, as defined in this clause, shall result in the withholding of payments if the contract includes the Section H clause Contractor Business Systems, and also may result in disapproval of the system.

(c) System criteria. The Contractor's accounting system shall provide for--

- (1) A sound internal control environment, accounting framework, and organizational structure;
- (2) Proper segregation of direct costs from indirect costs;
- (3) Identification and accumulation of direct costs by contract;
- (4) A logical and consistent method for the accumulation and allocation of indirect costs to intermediate and final cost objectives;
- (5) Accumulation of costs under general ledger control;
- (6) Reconciliation of subsidiary cost ledgers and cost objectives to general ledger;
- (7) Approval and documentation of adjusting entries;
- (8) Management reviews or internal audits of the system to ensure compliance with the Contractor's established policies, procedures, and accounting practices;
- (9) A timekeeping system that identifies employees' labor by intermediate or final cost objectives;
- (10) A labor distribution system that charges direct and indirect labor to the appropriate cost objectives;
- (11) Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account;
- (12) Exclusion from costs charged to Government contracts of amounts which are not allowable in terms of 48 CFR part 31, Contract Cost Principles and Procedures, and other contract provisions;
- (13) Identification of costs by contract line item and by units (as if each unit or line item were a separate contract), if required by the contract;
- (14) Segregation of preproduction costs from production costs, as applicable;
- (15) Cost accounting information, as required--
 - (i) By contract clauses concerning limitation of cost (48 CFR 52.232-20), limitation of funds (48 CFR 52.232-22), or allowable cost and payment (48 CFR 52.216-7); and
 - (ii) To readily calculate indirect cost rates from the books of accounts;
- (16) Billings that can be reconciled to the cost accounts for both current and cumulative amounts claimed and comply with contract terms;
- (17) Adequate, reliable data for use in pricing follow-on acquisitions; and

(18) Accounting practices in accordance with standards promulgated by the Cost Accounting Standards Board, if applicable, otherwise, Generally Accepted Accounting Principles.

(d) Significant deficiencies. (1) The Contracting Officer will provide an initial determination to the Contractor, in writing, on any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.

(2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's accounting system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.

(3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning--

(i) Remaining significant deficiencies;

(ii) The adequacy of any proposed or completed corrective action; and

(iii) System disapproval, if the Contracting Officer determines that one or more significant deficiencies remain.

(e) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.

(f) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's accounting system, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

H.4 DOE-H-2027 CONTRACTOR PROPERTY MANAGEMENT SYSTEM ADMINISTRATION (OCT 2014) (Revised)

(a) Definitions. As used in this clause--

Acceptable property management system means a property system that complies with the system criteria in paragraph (c) of this clause.

Property management system means the Contractor's system or systems for managing and controlling Government property.

Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.

(b) General. The Contractor shall establish and maintain an acceptable property management system. The Contractor shall provide in writing to the Contracting Officer documentation that its property management system meets the system criteria in paragraph (c) of this clause no later than 60 days after contract award. Failure to maintain an acceptable property management system, as defined in this clause, may result in disapproval of the system by the Contracting Officer and/or withholding of payments.

(c) System criteria. The Contractor's property management system shall be in accordance with paragraph (f) of the contract clause at 48 CFR 52.245-1.

(d) Significant deficiencies. (1) The Contracting Officer will provide an initial determination to the Contractor, in writing, of any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.

(2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's property management system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.

(3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning--

(i) Remaining significant deficiencies;

(ii) The adequacy of any proposed or completed corrective action; and

(iii) System disapproval, if the Contracting Officer determines that one or more significant deficiencies remain.

(e) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.

(f) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's property management system, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

H.5 DOE-H-2033 ALTERNATIVE DISPUTE RESOLUTION (OCT 2014)

(a) The DOE and the Contractor both recognize that methods for fair and efficient resolution of contractual issues in controversy by mutual agreement are essential to the successful and timely completion of contract requirements. Accordingly, DOE and the Contractor shall use their best efforts to informally resolve any contractual issue in controversy by mutual agreement. Issues of controversy may include a dispute, claim, question, or other disagreement. The parties agree to negotiate with each other in good faith, recognizing their mutual interests, and attempt to reach a just and equitable solution satisfactory to both parties.

(b) If a mutual agreement cannot be reached through negotiations within a reasonable period of time, the parties may use a process of alternate dispute resolution (ADR) in accordance with the clause at FAR 52.233-1, Disputes. The ADR process may involve mediation, facilitation, fact-finding, group conflict management, and conflict coaching by a neutral party. The neutral party may be an individual, a board comprised of independent experts, or a company with specific expertise in conflict resolution or expertise in the specific area of controversy. The neutral party will not render a binding decision, but will assist the parties in reaching a mutually satisfactory agreement. Any opinions of the neutral party shall not be admissible in evidence in any subsequent litigation proceedings.

(c) Either party may request that the ADR process be used. The Contractor shall make a written request to the Contracting Officer, and the Contracting Officer shall make a written request to the appropriate official of the Contractor. A voluntary election by both parties is required to participate in the ADR

process. The parties must agree on the procedures and terms of the process, and officials of both parties who have the authority to resolve the issue must participate in the agreed upon process.

(d) ADR procedures may be used at any time that the Contracting Officer has the authority to resolve the issue in controversy. If a claim has been submitted by the Contractor, ADR procedures may be applied to all or a portion of the claim. If ADR procedures are used subsequent to issuance of a Contracting Officer's final decision under the clause at FAR 52.233-1, Disputes, their use does not alter any of the time limitations or procedural requirements for filing an appeal of the Contracting Officer's final decision and does not constitute reconsideration of the final decision.

(e) If the Contracting Officer rejects the Contractor's request for ADR proceedings, the Contracting Officer shall provide the Contractor with a written explanation of the specific reasons the ADR process is not appropriate for the resolution of the dispute. If the Contractor rejects the Contracting Officer's request to use ADR procedures, the Contractor shall provide the Contracting Officer with the reasons for rejecting the request.

H.6 DOE-H-2038 NUCLEAR FACILITIES OPERATIONS (OCT 2014)

(a) The work under this contract includes the operation of nuclear facilities. The Contractor recognizes that such operations involve the risk of a nuclear incident which, while the chances are remote, could adversely affect the public's health and safety and the environment. Therefore, the Contractor shall exercise a degree of care commensurate with the risks involved.

(b) As used in this clause, the term "nuclear materials" is a collective term which includes source material, special nuclear material, and those other materials to which, by direction of DOE, the provisions of DOE's Orders or Directives regarding the control of nuclear materials, which have been or may be furnished to the Contractor by DOE, apply. The Contractor shall accept existing procedures and, in a manner satisfactory to the Contracting Officer, propose revised, as appropriate, accounting and measurement procedures, maintain current records and institute appropriate control measures for nuclear materials in its possession commensurate with the national security and DOE policy. The Contractor shall make such reports and permits subject to inspection as DOE may require with reference to nuclear materials. The Contractor shall take all reasonable steps and precautions to protect such materials against theft and misappropriations and to minimize all losses of such materials.

(c) Transfers of nuclear materials shall only be made with the prior written approval of the Contracting Officer, or authorized designee. Nuclear materials in the Contractor's possession, custody, or control shall be used only for furtherance of the work under this contract. The Contractor shall be responsible for the control of such nuclear materials in accordance with applicable DOE Orders and Directives regarding the control of nuclear materials, which have been or may be issued to the Contractor by DOE. The Contractor shall make a part of each purchase order, subcontract, and other commitment under this contract involving the use of nuclear materials for which the Contractor has accountability, appropriate terms and conditions for the use of nuclear materials and the responsibilities of the subcontractor or vendor regarding control of nuclear materials. In the case of fixed-price purchase orders, subcontracts, or other commitments involving the use of nuclear materials for which the Contractor has accountability, the terms and conditions with respect to nuclear materials shall also identify who has the financial responsibilities, if any, regarding such items as losses, scrap recovery, product recovery, and disposal.

H.7 DOE-H-2041 SUSTAINABLE ACQUISITION UNDER DOE SERVICE CONTRACTS (OCT 2014) (Revised)

(a) The Department of Energy (DOE) is committed to managing its facilities in a manner that will promote the natural environment and protect the health and well-being of its Federal employees and contractor service providers. The Contractor shall use its best efforts to support DOE in meeting those commitments, including sustainable acquisition or environmentally preferable contracting which may involve several interacting initiatives, such as -

- (1) Alternative Fueled Vehicles and Alternative Fuels;
- (2) Biobased Content Products (USDA Designated Products);
- (3) Energy Efficient Products;
- (4) Non-Ozone Depleting Alternative Products;
- (5) Recycled Content Products (EPA Designated Products); and
- (6) Water Efficient Products (EPA WaterSense Labeled Products).

(b) The Contractor should become familiar with these information resources:

- (1) Recycled Products are described at <http://epa.gov/cpg>.
- (2) Biobased Products are described at <http://www.biopreferred.gov/>.
- (3) Energy efficient products are described at <http://energystar.gov/products> for Energy Star products.
- (4) FEMP designated products are described at <http://www.eere.energy.gov/femp/procurement>
- (5) Environmentally Preferable Computers are described at <http://www.epeat.net>.
- (6) Non-Ozone Depleting Alternative Products are described at <http://www.epa.gov/ozone/strathome.html>.
- (7) Water efficient plumbing fixtures are described at <http://epa.gov/watersense>.

(c) If, in the course of providing services at the DOE site, the Contractor's services necessitate the acquisition of any of the above types of products, it is expected that the Contractor will acquire the sustainable, environmentally preferable models unless the product is not available competitively within a reasonable time, at a reasonable price, is not life cycle cost efficient in the case of energy consuming products, or does not meet reasonable performance standards. While there is no formal reporting, DOE prepares a sustainable acquisition annual report and the Contractor may be asked by the Contracting Officer to provide information in support of DOE's report.

H.8 DOE-H-2044 MATERIAL SAFETY DATA SHEET AVAILABILITY (OCT 2014)

In implementation of the clause at FAR 52.223-3, Hazardous Material Identification and Material Safety Data, the Contractor shall obtain, review and maintain a Material Safety Data Sheet (MSDS) in a readily accessible manner for each hazardous material (or mixture containing a hazardous material) ordered, delivered, stored or used; and maintain an accurate inventory and history of use of hazardous materials at each use and storage location. The MSDS shall conform to the requirements of 29 CFR 1910.1200(g).

H.9 DOE-H-2046 DIVERSITY PROGRAM (OCT 2014)

(a) The Contractor shall develop and implement a diversity program consistent with and in support of the DOE's diversity program. A diversity plan covering the full period of performance (base and option periods) shall be submitted to the Contracting Officer for approval within 30 calendar days after the effective date of the contract. Once the diversity plan is approved by the Contracting Officer, the Contractor shall implement the diversity plan within 15 calendar days of its approval by the Contracting Officer.

(b) The diversity plan shall address, at a minimum, the Contractor's approach to ensure an effective diversity program (including addressing applicable affirmative action and equal employment opportunity regulations) to include: (1) a statement of the Contractor's policies and practices; and (2) planned

initiatives and activities which demonstrate a commitment to a diversity program, including recruitment strategies for hiring a diverse work force. The diversity plan shall also address, as a minimum, the Contractor's approach for promoting diversity through (1) the Contractor's work force; (2) educational outreach, including a mentor-protégé program; (3) stakeholder involvement and outreach; (4) subcontracting; and (5) economic development.

(c) An annual diversity report shall be submitted pursuant to Section J. This report shall provide a list of accomplishments achieved, both internally and externally during the current reporting period, and projected initiatives during the next reporting period. The report shall also list any proposed changes to the diversity plan which shall be subject to the Contracting Officer's approval.

H.10 DOE-H-2048 PUBLIC AFFAIRS - CONTRACTOR RELEASES OF INFORMATION (OCT 2014)

In implementation of the clause at DEAR 952.204-75, Public Affairs, all communications or releases of information to the public, the media, or Members of Congress prepared by the Contractor related to work performed under the contract shall be reviewed and approved by DOE prior to issuance. Therefore, the Contractor shall, at least 5 calendar days prior to the planned issue date, submit a draft copy to the Contracting Officer of any planned communications or releases of information to the public, the media, or Members of Congress related to work performed under this contract. The Contracting Officer will obtain necessary reviews and clearances and provide the Contractor with the results of such reviews prior to the planned issue date. The Contractor, as a publicly traded company, must comply with SEC reporting and disclosure requirements. Nothing in this Clause shall be construed as (i) preventing the Contractor from meeting its SEC reporting and disclosure requirements or (ii) requiring the Contractor to violate its SEC reporting and disclosure requirements.

H.11 DOE-H-2049 INSURANCE REQUIREMENTS (OCT 2014)

(a) In accordance with the clause FAR 52.228-5, the following types and minimum amounts of insurance shall be maintained by the Contractor:

(1) Workers' compensation - Amount in accordance with applicable Federal and State workers' compensation and occupational disease statutes.

(2) Employer's liability - \$100,000 (except in States with exclusive or monopolistic funds that do not permit worker's compensation to be written by private carriers).

(3) Comprehensive bodily injury liability - \$500,000.

(4) Property damage liability - None, unless otherwise required by the Contracting Officer.

(5) Comprehensive automobile bodily injury liability - \$200,000 per person and \$500,000 per occurrence.

(6) Comprehensive automobile property damage - \$20,000 per occurrence.

(b) The Contractor shall provide evidence of such insurance, if requested by the Contracting Officer; and the Contracting Officer may require such evidence to be provided prior to the commencement of work under the contract.

H.12 DOE-H-2052 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF THE OFFEROR

The following additional contractor Representations, Certifications and Other Statements are hereby incorporated into the contract by reference:

Name of the Representations, Certifications and Other Statements

Section K - Representations, Certification, and Other Statements of Offerors

Date

5/23/19

H.13 DOE-H-2056 ANNUAL INDIRECT BILLING RATES (OCT 2014)

(a) Pursuant to the clause at FAR 52.216-7, Allowable Cost and Payment, indirect billing rates, revised billing rates (as necessary), and final indirect cost rate agreements must be established between the Contractor and the Department of Energy (DOE) for each of the Contractor's fiscal years for the life of the cost reimbursement type contract. These indirect rate agreements allow the Contractor to recover indirect expenses incurred during a fiscal year for which final indirect rates have not been established.

(b) Indirect billing and revised indirect billing rate proposals must represent the Contractor's best estimate of the anticipated indirect expenses to be incurred and the estimated allocation base for the current fiscal year in accordance with its approved accounting system. Revised billing rates allow the adjustment of the approved billing rates, based upon updated information, in order to prevent significant over or under billings.

(c) The establishment of rates for the reimbursement of independent research and development/bid and proposal costs shall be in accordance with the provisions of FAR Subpart 42.7, "Indirect Cost Rates," FAR 31.205-18, "Independent Research and Development and Bid and Proposal Costs," and DEAR 931.205-18, "Independent Research and Development (IR&D) and Bid and Proposal (B&P) Costs."

(d) Paragraph (e) below, identifies the requirements and process to be followed by the Contractor in establishing indirect rates for contracts when DOE is the Cognizant Federal Agency (CFA) and when DOE is not the CFA. Specific instructions for submittal of indirect rate proposals to agencies other than DOE must be obtained from the agency involved.

(e) Requirements whether or not DOE is the CFA. (1) Allowability of costs and acceptability of cost allocation methods shall be determined in accordance with the applicable sections of FAR Part 30, Cost Accounting Standards, FAR Part 31 and DEAR 931, Contract Cost Principles and Procedures, in effect as of the date of this contract.

(2) Pending settlement of the final indirect expense rates for any period, the Contractor shall be reimbursed at billing rates approved by the CFA subject to acknowledgment by the cognizant DOE Contracting Officer. These billing rates are subject to appropriate adjustments when revised by mutual agreement or when the final indirect rates are settled, either by mutual agreement or unilateral determination by the CFA subject to acknowledgment by the cognizant DOE Contracting Officer.

(3) The Contractor shall continue to use the latest DOE or CFA approved billing rate(s) which have been acknowledged by the cognizant DOE Contracting Officer until those rates are superseded by establishment of final rates or more current billing rates. In those cases where current billing rates have not been established, the latest approved final rates shall be used for invoicing, unless it is determined by the cognizant DOE Contracting Officer that use of said rates would not provide for an equitable recovery of indirect costs. In those instances, the cognizant DOE Contracting Officer will take whatever steps are necessary to establish rates that DOE considers to be reasonable for billing purposes.

H.14 DOE-H-2057 DEPARTMENT OF LABOR WAGE DETERMINATIONS (OCT 2014)

The Contractor's performance under this contract shall comply with the requirements of the U.S. Department of Labor Wage Determination(s) located in Section J, Attachment 3 and the clause at FAR 52.222-42, Statement of Equivalent Rates for Federal Hires.

H.15 DOE-H-2059 PRESERVATION OF ANTIQUITIES, WILDLIFE AND LAND AREAS (OCT 2014)

(a) Federal Law provides for the protection of antiquities located on land owned or controlled by the Government. Antiquities include Indian graves or campsites, relics and artifacts. The Contractor shall control the movements of its personnel and its subcontractor's personnel at the job site to ensure that any existing antiquities discovered thereon will not be disturbed or destroyed by such personnel. It shall be the duty of the Contractor to report to the Contracting Officer the existence of any antiquities so discovered.

(b) The Contractor shall also preserve all vegetation (including wetlands) except where such vegetation must be removed for survey or construction purposes. Any removal of vegetation shall be in accordance with the terms of applicable habitat mitigation plans and permits. Furthermore, all wildlife must be protected consistent with programs approved by the Contracting Officer.

(c) Except as required by or specifically provided for in other provisions of this contract, the Contractor shall not perform any excavations, earth borrow, preparation of borrow areas, or otherwise disturb the surface soils within the job site without the prior approval of DOE or its designee.

H.16 DOE-H-2061 CHANGE ORDER ACCOUNTING (OCT 2014)

The Contractor shall maintain change order accounting whenever the estimated cost of a change or series of related changes exceeds \$100,000. The Contractor, for each change or series of related changes, shall maintain separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less allocable credits) of work, both changed and not changed, allocable to the change. The Contractor shall maintain such accounts until the parties agree to an equitable adjustment for the changes ordered by the Contracting Officer or the matter is conclusively disposed of in accordance with the Disputes clause.

H.17 DOE-H-2062 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (OCT 2014)

(a) Pursuant to the clause at FAR 52.204-9, Personal Identity Verification of Contractor Personnel, the Contractor shall comply with applicable DOE regulations, policies and directives regarding identification, credential and access management for its personnel who have routine physical access to DOE-owned or -controlled sites or facilities or routine access to DOE information systems.

(b) The Contractor shall comply with the requirements of those DOE directives, or parts thereof, identified below in implementing the requirements of this clause. The Contracting Officer may, at any time, unilaterally amend this clause in order to add, modify or delete specific requirements.

H.18 DOE-H-2065 REPORTING OF FRAUD, WASTE, ABUSE, CORRUPTION, OR MISMANAGEMENT (OCT 2014)

The Contractor shall comply with the following:

(a) Notify employees annually of their duty to report allegations of fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement relating to DOE programs, operations, facilities, contracts, or information technology systems to an appropriate authority (e.g., OIG, other law enforcement, supervisor, employee concerns office, security officials). Examples of violations to be reported include, but are not limited to, allegations of false statements; false claims; bribery; kickbacks; fraud; DOE environment, safety, and health violations; theft; computer crimes; contractor mischarging; conflicts of interest; and conspiracy to commit any of these acts. Contractors must also ensure that their employees are aware that they may always report incidents or information directly to the Office of Inspector General (OIG).

(b) Display the OIG hotline telephone number in buildings and common areas such as cafeterias, public telephone areas, official bulletin boards, reception rooms, and building lobbies.

(c) Publish the OIG hotline telephone number in telephone books and newsletters under the Contractor's cognizance.

(d) Ensure that its employees report to the OIG within a reasonable period of time, but not later than 24 hours after discovery, all alleged violations of law, regulations, or policy, including incidents of fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement, that have been referred to Federal, State, or local law enforcement entities.

(e) Ensure that its employees report to the OIG any allegations of reprisals taken against employees who have reported to the OIG fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement.

(f) Ensure that its managers do not retaliate against DOE contractor employees who report fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement.

(g) Ensure that all their employees understand that they must -

(1) Comply with requests for interviews and briefings and must provide affidavits or sworn statements, if so requested by an employee of the OIG so designated to take affidavits or sworn statements;

(2) Not impede or hinder another employee's cooperation with the OIG; and

(3) Not take reprisals against DOE contractor employees who cooperate with or disclose information to the OIG or other lawful appropriate authority.

(h) Seek more specific guidance concerning reporting of fraud, waste, abuse, corruption, or mismanagement, and cooperation with the Inspector General, in DOE directives.

H.19 DOE-H-2068 CONFERENCE MANAGEMENT (OCT 2014)

The Contractor agrees that:

a) The contractor shall ensure that contractor-sponsored conferences reflect the DOE/NNSA's commitment to fiscal responsibility, appropriate stewardship of taxpayer funds and support the mission of DOE/NNSA as well as other sponsors of work. In addition, the contractor will ensure conferences do not include any activities that create the appearance of taxpayer funds being used in a questionable manner.

b) For the purposes of this clause, "conference" is defined in Attachment 2 to the Deputy Secretary's memorandum of August 17, 2015 entitled "Updated Guidance on Conference-Related Activities and Spending."

c) Contractor-sponsored conferences include those events that meet the conference definition and either or both of the following:

1) The contractor provides funding to plan, promote, or implement an event, except in instances where a contractor:

i) covers participation costs in a conference for specified individuals (e.g. students, retirees, speakers, etc.) in a total amount not to exceed \$10,000 (by individual contractor for a specific conference) or

ii) purchases goods or services from the conference planners (e.g., attendee registration fees, renting booth space).

2) The contractor authorizes use of its official seal, or other seals/logos/ trademarks to promote a conference. Exceptions include non-M&O contractors who use their seal to promote a conference that is

unrelated to their DOE contract(s) (e.g., if a DOE IT contractor were to host a general conference on cyber security).

d) Attending a conference, giving a speech or serving as an honorary chairperson does not connote sponsorship.

e) The contractor will provide information on conferences they plan to sponsor with expected costs exceeding \$100,000 in the Department's Conference Management Tool, including:

1) Conference title, description, and date

2) Location and venue

3) Description of any unusual expenses (e.g., promotional items)

4) Description of contracting procedures used (e.g., competition for space/support)

5) Costs for space, food/beverages, audio visual, travel/per diem, registration costs, recovered costs (e.g., through exhibit fees)

6) Number of attendees

f) The contractor will not expend funds on the proposed contractor-sponsored conferences with expenditures estimated to exceed \$100,000 until notified of approval by the contracting officer.

g) For DOE-sponsored conferences, the contractor will not expend funds on the proposed conference until notified by the contracting officer.

1) DOE-sponsored conferences include events that meet the definition of a conference and where the Department provides funding to plan, promote, or implement the conference and/or authorizes use of the official DOE seal, or other seals/logos/trademarks to promote a conference. Exceptions include instances where DOE:

i) covers participation costs in a conference for specified individuals (e.g. students, retirees, speakers, etc.) in a total amount not to exceed \$10,000 (by individual contractor for a specific conference) or

ii) purchases goods or services from the conference planners (e.g., attendee registration fees; renting booth space); or provide funding to the conference planners through Federal grants.

2) Attending a conference, giving a speech, or serving as an honorary chairperson does not connote sponsorship.

3) The contractor will provide cost and attendance information on their participation in all DOE-sponsored conference in the DOE Conference Management Tool.

h) For non-contractor sponsored conferences, the contractor shall develop and implement a process to ensure costs related to conferences are allowable, allocable, reasonable, and further the mission of DOE/NNSA. This process must at a minimum:

1) Track all conference expenses.

2) Require the Laboratory Director (or equivalent) or Chief Operating Officer approve a single conference with net costs to the contractor of \$100,000 or greater.

i) Contractors are not required to enter information on non-sponsored conferences in DOE'S Conference Management Tool.

Once funds have been expended on a non-sponsored conference, contractors may not authorize the use of their trademarks/logos for the conference, provide the conference planners with more than \$10,000 for specified individuals to participate in the conference, or provide any other sponsorship funding for the conference. If a contractor does so, its expenditures for the conference may be deemed unallowable.

H.20 DOE-H-2070 KEY PERSONNEL (OCT 2014) (Revised)

(a) Pursuant to the clause at DEAR 952.215-70, Key Personnel, the key personnel for this contract are identified below:

NAME: Grover F. Jones (Butch)

POSITION/TITLE: Program Manager

NAME: Glenn W. Strausser

POSITION/TITLE: WBS 12.1 EPC Manager

NAME: J. Will Jones II (Buddy)

POSITION/TITLE: WBS 12.2 Manufacturing Manager

NAME: Matthew D. Snider

POSITION/TITLE: WBS 12.3 Plant Support & Start Up Manager

NAME: Kelly L. Wiehle

POSITION/TITLE: WBS 12.4 Regulatory Manager

NAME: Jonathan K. Corrado

POSITION/TITLE: WBS 12.5 Nuclear Safety Manager

NAME: R. Lindsey Krause

POSITION/TITLE: WBS 12.6 Program Management Manager

In addition to the requirement for the Contracting Officer's approval before removing, replacing, or diverting any of the listed key personnel, the Contracting Officer's approval is also required for any change to the position assignment of a current key person.

(b) Key personnel team requirements. The Contracting Officer and designated Contracting Officer's Representative(s) shall have direct access to the key personnel assigned to the contract. All key personnel shall be permanently assigned to their respective positions.

(c) Definitions. In addition to the definitions contained in the clause at DEAR 952.215-70, the following shall apply:

(1) The term "reasonably in advance" is defined as 30 calendar days.

H.21 DOE-H-2071 DEPARTMENT OF ENERGY DIRECTIVES (OCT 2014) (Revised)

(a) In performing work under this contract, the Contractor shall comply with the requirements of those Department of Energy (DOE) directives in Section J of the contract.

(b) The Contracting Officer may, at any time, unilaterally amend this clause, or other clauses which incorporate DOE directives, in order to add, modify or delete specific requirements. Prior to revising the listing of directives, the Contracting Officer shall notify the Contractor in writing of the Department's intent to revise the list, and the Contractor shall be provided with the opportunity to assess the effect of the Contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule, and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract. Within 30 days after receipt of the Contracting Officer's notice, the Contractor shall advise the Contracting Officer in writing of the potential impact of the Contractor's compliance with the revised list. Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise the listing of directives and so advise the Contractor not later than 30 days prior to the effective date of the revision.

(c) Notwithstanding the process described in paragraph (b), the Contracting Officer may direct the Contractor to immediately begin compliance with the requirements of any directive.

(d) The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision pursuant to the Changes clauses included in this contract.

(e) Regardless of the performer of the work, the Contractor is responsible for compliance with the requirements of this clause. The Contractor shall include this clause in all subcontracts to the extent necessary to ensure the Contractor's compliance with these requirements.

H.22 DOE-H-2075 PROHIBITION ON FUNDING FOR CERTAIN NONDISCLOSURE AGREEMENTS (OCT 2014)

The Contractor agrees that:

a) No cost associated with implementation or enforcement of nondisclosure policies, forms or agreements shall be allowable under this contract if such policies, forms or agreements do not contain the following provisions: "These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling."

b) The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

c) Notwithstanding the provisions of paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the United States Government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity unless specifically authorized to do so by the United States Government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law.

H.23 DOE-H-2076 LOBBYING RESTRICTIONS (NOV 2018)

In accordance with 18 U.S.C. § 1913, the Contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress. This restriction is in addition to those prescribed elsewhere in statute and regulation.

H.24 DOE-H-2077 DEPARTMENT OF ENERGY TRAINING INSTITUTE - OCCUPATIONAL HEALTH, SAFETY, AND EMERGENCY RESPONSE (JAN 2017)

(a) The Contractor shall utilize the Department of Energy (DOE) Training Institute (DTI) resources to the maximum extent practical for occupational, health, safety, and emergency response training. The Contractor, as applicable, shall use DTI by utilizing the reciprocity program, instructor-certification, mobile training teams, and use of common core curriculum as applicable.

(1) Reciprocity: The DTI Training Reciprocity program evaluates and certifies training programs and core content against DOE requirements, establishing a basis for consistent training. Reciprocity reduces redundant training to improve employee mobility and project mobilization, saving time and resources. Reference DOE Policy 364.1.

(2) Common Core Curriculum: Courses in the Common Core Training Program are developed and maintained by DTI instructional designers and subject matter experts. These courses are available enterprise-wide for delivery by DTI-certified instructors. Common Core Training eliminates duplicative course development and maintenance activities while providing maximum flexibility for delivery.

(3) Instructor-Certification: The DTI Instructor Certification Program recognizes subject matter experts and experienced trainers who are qualified to deliver common core courses across the DOE enterprise. The Contractor selects instructors to be certified by DTI.

(4) Mobile Training Teams: Mobile Training Teams are available to DOE locations who do not maintain the capability to deliver a specific course. Courses are delivered by certified DTI instructors who are subject matter experts in the topical area.

(b) DTI course offerings, information on becoming a certified DTI trainer, enrollment, and contact information can be found on <https://dti.doe.gov>.

(c) DTI training shall be considered common core fundamental material. Contractors are expected to provide gap training needed to address site specifics identified through their approved Integrated Safety Management (ISM) Program and associated program plans required by existing DOE requirements. Gap training shall not repeat fundamental training core content.

(d) DTI training is funded by DOE with no cost to the Contractors.

(e) The Contractor shall first consider DTI for all applicable training needs and only obtain such training outside of DTI after written approval of the Contracting Officer (CO) following the Contractor's written request containing the following: (1) rationale describing in detail why DTI provided material, including contractor supplemented site specific material, is insufficient, (2) rationale supporting the increased cost, scope, and schedule of maintaining a local course and capability for training instruction proposed in place of DTI training, and (3) rationale as to why the loss of standardization DOE is seeking by using alternative materials is of value to the DOE. Prior to requesting CO approval, the contractor shall complete the course request form at <https://dti.doe.gov>. DTI will respond within 10 working days on the availability of DTI course materials that might provide the course or assist in the development of the Contractor course.

(f) This contract clause shall be flowed down to all subcontractors, and the Contractor is responsible for compliance by its employees and subcontractors.

H.25 DOE-H-2078 MULTIFACTOR AUTHENTICATION FOR INFORMATION SYSTEMS

The Contractor shall take all necessary actions to achieve multifactor authentication (MFA) for standard and privileged user accounts of all classified and unclassified networks. In so doing, the Contractor shall comply with the requirements and procedures established in the document "U.S. Department of Energy Multifactor Authentication Implementation Approach" and its appendices as determined by the Contracting Officer.

H.26 DOE-H-2079 AGREEMENT REGARDING WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (APR 2018) (Revised)

(a) This contract is subject to the policies, criteria, and procedures of 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites.

(b) With the award of the letter contract, the Contractor agrees to provide to the Contracting Officer, within 30 days after notification of selection for award, or award of a contract, whichever occurs first, pursuant to this solicitation, its written workplace substance abuse program consistent with the requirements of 10 CFR part 707. DOE may grant an extension to the notification or implementation period if necessary as per 10 CFR 707.5(g).

(c) Failure of the Contractor to agree to the condition of responsibility set forth in paragraph (b) of this provision, renders the Contractor unqualified and ineligible for award.

H.27 DOE-H-2080 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (APR 2018)

(a) Program implementation. The Contractor shall, consistent with 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, incorporated herein by reference with full force and effect, develop, implement, and maintain a workplace substance abuse program.

(b) Remedies. In addition to any other remedies available to the Government, the Contractor's failure to comply with the requirements of 10 CFR part 707 or to perform in a manner consistent with its approved program may render the Contractor subject to: the suspension of contract payments, or, where applicable, a reduction in award fee; termination for default; and suspension or debarment.

(c) Subcontracts. (1) The Contractor agrees to notify the Contracting Officer reasonably in advance of, but not later than 30 days prior to, the award of any subcontract the Contractor believes may be subject to the requirements of 10 CFR part 707, unless the Contracting Officer agrees to a different date.

(2) The DOE Prime Contractor shall require all subcontracts subject to the provisions of 10 CFR part 707 to agree to develop and implement a workplace substance abuse program that complies with the requirements of 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, as a condition for award of the subcontract. The DOE Prime Contractor shall review and approve each subcontractor's program, and shall periodically monitor each subcontractor's implementation of the program for effectiveness and compliance with 10 CFR part 707.

(3) The Contractor agrees to include, and require the inclusion of, the requirements of this clause in all subcontracts, at any tier, that are subject to the provisions of 10 CFR part 707.

H.28 Emergency Response

(a) The U.S. Department of Energy (DOE) Nuclear Energy Oak Ridge Site Office Manager, DOE Portsmouth Site Manager, or Contractor shall determine when an emergency situation may exist and notify the appropriate emergency response organization (e.g., Laboratory Shift Superintendent, Plant Shift Superintendent). In the event of an emergency, the DOE Manager of the affected site will have the authority to direct any and

all activities of the Contractor and subcontractors necessary to resolve the emergency situation in accordance with ACO's NRC License SNM 7003. Upon termination of the emergency event, the Contractor shall perform recovery actions as appropriate.

- (b) The Contractor shall include this Clause in all subcontracts at any tier for work performed in support of the on-site work under this contract.

H.29 Security Qualifications

- (a) The Contractor may be required to perform work in designated security areas or work with documents or information that may require an access authorization (clearance). Additionally, the scope of the work may require enrollment in the DOE Human Reliability Program (see 10 CFR Part 712, *Human Reliability Program*). The Contractor shall ensure that personnel assigned under this Contract and working with classified information, matter, and/or materials possess a DOE "Q" or "L" access authorization (clearance) matching the classification level of the data and information the employee will be required to work on in the performance of their assigned tasks.
- (b) Individuals that do not require a "Q" or "L" clearance will possess either a Local Site Specific Only badge (temporary only) or HSPD-12 badge. The Contractor shall not propose non-U.S. citizens for positions requiring security clearances (Clearance-Access authorizations are granted by the DOE pursuant to 10 CFR Part 710, *Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special Nuclear Material*). Security badges must be worn properly while working at DOE facilities.
- (c) Clearances will be provided and paid for by DOE. The request for clearance and renewal of clearances must be justified based on actual job performance requirements. Uncleared personnel requiring access to security areas where security clearances are needed for unescorted access shall be escorted in these areas by approved escorts.
- (d) The Contractor shall conduct pre-employment screening of prospective employees in order to ensure trustworthiness and reliability. Pre-employment screening shall include, as a minimum, verification of personal identity, previous employment, and education, and the results of a credit and law enforcement check. There is no pre-screening required for incumbent employees that do not have a "Q" or "L" clearance.
- (e) Requests for access authorization shall not be submitted until the Contract has been awarded, and a favorable Foreign Ownership, Control, or Influence determination must be rendered by DOE before an access authorization will be granted, reinstated, continued, extended, or transferred for employees or prospective employees on the contract.
- (f) The Contractor shall turn in badges for employees: (1) who are no longer working on the Contract; (2) who no longer require access; (3) when their badge expires; or (4) when the Contract expires or is terminated.

H.30 DOE-H-2019 Disposition of Intellectual Property - Failure to Complete Contract Performance (Oct 2014) (Revised)

The following provisions shall apply in the event the Contractor does not complete contract performance for any reason:

- (a) Regarding technical data and other intellectual property, DOE may take possession of all technical data, including proprietary data and data obtained from subcontractors, licensors, and licensees, necessary to operate the treatment facility ("facility"), subject to the Rights in Data clause of this contract, as well as the designs, operation manuals, flowcharts, software, etc., construction work in progress, completed manuals, flowcharts, completed facilities, equipment and other property and information necessary for performance of the work or operation of the facility to treat the waste in conformance with the purpose of this contract. Proprietary data will be protected in accordance with the limited rights data provisions of the Rights in Data Clause.

(b) The Contractor agrees to and does hereby grant to the Government an irrevocable non-exclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor, and any other intellectual property, which are owned or controlled by the Contractor, at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which covers articles, materials, or products manufactured at the facility, (1) to practice or to have practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. The acceptance or exercise by the Government of the aforesaid rights and license shall not prevent the Government at any time from contesting the enforceability, validity, or scope of, or title to, any rights or patents or other intellectual property herein licensed.

(c) In addition, the Contractor will take all necessary steps to assign any licenses in any third party intellectual property for operations and closure of the facility to DOE or such other third party as DOE may designate.

H.31 DOE-H-2021 Work Stoppage and Shutdown Authorization (Oct 2014)

- (a) Imminent Health and Safety Hazard is a given condition or situation which, if not immediately corrected, could result in serious injury or death, including exposure to radiation and toxic/hazardous chemicals. Imminent Danger in relation to the facility safety envelope is a condition, situation, or proposed activity which, if not terminated, could cause, prevent mitigation of, or seriously increase the risk of (1) nuclear criticality, (2) radiation exposure, (3) fire/explosion, and/or (4) toxic hazardous chemical exposure.
- (b) Work Stoppage. In the event of an Imminent Health and Safety Hazard, identified by facility line management or operators or facility health and safety personnel overseeing facility operations, or other individuals, the individual or group identifying the imminent hazard situation shall immediately take actions to eliminate or mitigate the hazard (e.g., directing the operator/implementer of the activity or process causing the imminent hazard to stop work, initiating emergency response actions or other actions) to protect the health and safety of the workers and the public, and to protect DOE facilities and the environment. In the event an Imminent Health and Safety Hazard is identified, the individual or group identifying the hazard should coordinate with an appropriate Contractor official, who will direct the shutdown or other actions, as required. Such mitigating action(s) should subsequently be coordinated with the DOE and Contractor management. The suspension or stop-work order should be promptly confirmed in writing by the CO.
- (c) Shutdown. In the event of an imminent danger in relation to the facility safety envelope or a non-Imminent Health and Safety Hazard identified by facility line managers, facility operators, health and safety personnel overseeing facility operations, or other individuals, the individual or group identifying the potential health and safety hazard may recommend facility shutdown in addition to any immediate actions needed to mitigate the situation. However, the recommendation must be coordinated with Contractor management and the DOE Site Manager. Any written direction to suspend operations shall be issued by the CO, pursuant to FAR 52.242-15 clause entitled *Stop-Work Order*.
- (d) Facility Representatives. DOE personnel designated as Facility Representatives provide the technical/safety oversight of operations. The Facility Representative has the authority to "stop work," which applies to the shutdown of an entire plant, activity, or job. This stop-work authority will be used for an operation of a facility which is performing work the Facility Representative believes:
- (1) Poses an imminent danger to health and safety of workers or the public if allowed to continue;
 - (2) Could adversely affect the safe operation of, or could cause serious damage to, the facility if allowed to continue; or
 - (3) Could result in the release of radiological or chemical hazards to the environment in excess of regulatory limits.

- (e) This clause flows down to all subcontractors at all tiers. Therefore, the Contractor shall insert a clause, modified appropriately to substitute “Contractor Representatives” for “the CO,” in all subcontracts.

H.32 NRC NUCLEAR MATERIALS LICENSE

Contractor will construct, maintain, and operate the site under a license granted by the NRC and in accordance with the Memorandum of Understanding between Department of Energy and the Nuclear Regulatory Commission on Cooperation Regarding the American Centrifuge Plant in Piketon, Ohio (DOE-NRC MOU). Further, in the performance of this Contract, the Contractor will abide by all conditions and requirements included in the NRC Nuclear Materials License (SNM-7003) and regulations for this activity and with the requirements contained in the DOE-NRC MOU.

Section I - Contract Clauses

I.1 52.202-1 -- Definitions (Nov 2013)

When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--

- (a) The solicitation, or amended solicitation, provides a different definition;
- (b) The contracting parties agree to a different definition;
- (c) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or
- (d) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

I.2 52.203-3 - Gratuities (Apr 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative --

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled --

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

I.3 52.203-5 -- Covenant Against Contingent Fees (May 2014)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

“Bona fide employee,” as used in this clause, means a person, employed by a contractor and subject to the contractor’s supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

“Contingent fee,” as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

“Improper influence,” as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

I.4 52.203-6 -- Restrictions on Subcontractor Sales to the Government (Sep 2006)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed the simplified acquisition threshold.

I.5 52.203-7 -- Anti-Kickback Procedures (May 2014)

(a) Definitions.

“Kickback,” as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

“Person,” as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

“Prime contract,” as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

“Prime Contractor” as used in this clause, means a person who has entered into a prime contract with the United States.

“Prime Contractor employee,” as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

“Subcontract,” as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

“Subcontractor,” as used in this clause,

(1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and

(2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

“Subcontractor employee,” as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The 41 U.S.C. chapter 87, Kickbacks, prohibits any person from --

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)

(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may

(i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or

(ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$150,000.

1.6 52.203-8 -- Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (May 2014)

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C. 2102-2104, Restriction on Obtaining and Disclosing Certain Information, the Government may --

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which --

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct violates 41 U.S.C. 2102 for the purpose of either --

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct punishable under 41 U.S.C. 2105(a).

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

I.7 52.203-10 -- Price or Fee Adjustment for Illegal or Improper Activity (May 2014)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of 41 U.S.C. 2102 or 2103, as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be --

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts --

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may --

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the statute by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

I.8 52.203-12 -- Limitation on Payments to Influence Certain Federal Transactions (Oct 2010)

(a) *Definitions.* As used in this clause-

"Agency" means executive agency as defined in Federal Acquisition Regulation (FAR) 2.101.

"Covered Federal action" means any of the following Federal actions:

- (1) Awarding any Federal contract.
- (2) Making any Federal grant.
- (3) Making any Federal loan.
- (4) Entering into any cooperative agreement.
- (5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization" have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C.450B) and include Alaskan Natives.

"Influencing or attempting to influence" means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government" means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency" includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
- (3) A special Government employee, as defined in section 202, Title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

“Person” means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

“Reasonable compensation” means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

“Reasonable payment” means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

“Recipient” includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

“Regularly employed” means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

“State” means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) *Prohibition.* 31 U.S.C. 1352 prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352 the Contractor shall not use appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of this contractor the extension, continuation, renewal, amendment, or modification of this contract.

(1) The term *appropriated funds* does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that these other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(c) *Exceptions.* The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) Agency and legislative liaison by Contractor employees.

(i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern-

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(2) Professional and technical services.

(i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(iii) As used in this paragraph (c)(2), "professional and technical services" are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2) (iii)).

(iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.

(d) Disclosure.

(1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C.1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) *Cost allowability.* Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(g) *Subcontracts.*

(1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract exceeding \$150,000 under this contract. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in any subcontract exceeding \$150,000.

I.9 52.203-13 - Contractor Code of Business Ethics and Conduct (Oct 2015)

(a) *Definition.* As used in this clause--

“Agent” means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

“Full cooperation”-

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors’ and investigators’ request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require-

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from-

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

“Principal” means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

“Subcontract” means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

“Subcontractor” means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) Code of business ethics and conduct.

(1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall-

(i) Have a written code of business ethics and conduct;

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall-

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)

(i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed-

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by the law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) *Business ethics awareness and compliance program and internal control system.* This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial item as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals and employees, and as appropriate, the Contractor's agents and subcontractors.

(2) An internal control system.

(i) The Contractor's internal control system shall-

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and special requirements of Government contracting, including-

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontractor thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that have a value in excess of \$5.5 million and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

I.10 52.203-14 - Display of Hotline Poster(s) (Oct 2015)

(a) *Definition.*

“United States,” as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) *Display of fraud hotline poster(s).* Except as provided in paragraph (c)-

(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites-

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

Poster(s)	Obtain from
DOE IG Hotline Poster	https://www.energy.gov/sites/prod/files/igprod/documents/Hotline_poster.pdf

(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) *Subcontracts.* The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed \$5.5 million, except when the subcontract-

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

I.11 52.203-17 - Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights (Apr 2014)

(a) This contract and employees working on this contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employee whistleblower protections

established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and FAR 3.908.

(b) The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts over the simplified acquisition threshold.

I.12 52.203-19 - Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017)

(a) *Definitions.* As used in this clause--

“Internal confidentiality agreement or statement” means a confidentiality agreement or any other written statement that the contractor requires any of its employees or subcontractors to sign regarding nondisclosure of contractor information, except that it does not include confidentiality agreements arising out of civil litigation or confidentiality agreements that contractor employees or subcontractors sign at the behest of a Federal agency.

“Subcontract” means any contract as defined in subpart [2.1](#) entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

“Subcontractor” means any supplier, distributor, vendor, or firm (including a consultant) that furnishes supplies or services to or for a prime contractor or another subcontractor.

(b) The Contractor shall not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(c) The Contractor shall notify current employees and subcontractors that prohibitions and restrictions of any preexisting internal confidentiality agreements or statements covered by this clause, to the extent that such prohibitions and restrictions are inconsistent with the prohibitions of this clause, are no longer in effect.

(d) The prohibition in paragraph (b) of this clause does not contravene requirements applicable to Standard Form 312 (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(e) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015, (Pub. L. 113-235), and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions) use of funds appropriated (or otherwise made available) is prohibited, if the Government determines that the Contractor is not in compliance with the provisions of this clause.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), in subcontracts under such contracts.

I.13 52.204-4 -- Printed or Copied Double-Sided on Postconsumer Fiber Content Paper (May 2011)

(a) *Definitions.* As used in this clause-

Postconsumer fiber means-

- (1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or
- (2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not
- (3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

(b) The Contractor is required to submit paper documents, such as offers, letters, or reports that are printed or copied double-sided on paper containing at least 30 percent postconsumer fiber, whenever practicable, when not using electronic commerce methods to submit information or data to the Government.

I.14 52.204-9 -- Personal Identity Verification of Contractor Personnel (Jan 2011)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government;

- (1) When no longer needed for contract performance.
- (2) Upon completion of the Contractor employee's employment.
- (3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

I.15 52.204-10 - Reporting Executive Compensation and First-Tier Subcontract Awards (Oct 2018)

(a) *Definitions.* As used in this clause:

"Executive" means officers, managing partners, or any other employees in management positions.

"First-tier subcontract" means a subcontract awarded directly by the Contractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It

does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that would benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect cost.

"Month of award" means the month in which a contract is signed by the Contracting Officer or the month in which a first-tier subcontract is signed by the Contractor.

"Total compensation" means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

(1) Salary and bonus.

(2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Financial Accounting Standards Board's Accounting Standards Codification (FASB ASC) 718, Compensation-Stock Compensation.

(3) Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

(4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

(5) Above-market earnings on deferred compensation which is not tax-qualified.

(6) Other compensation, if the aggregate value of all such other compensation (*e.g.*, severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

(b) Section 2(d)(2) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

(c) Nothing in this clause required the disclosure of classified information.

(d)

(1) Executive compensation of the prime contractor. As a part of its annual registration requirement in the System for Award Management (SAM) (FAR provision 52.204-7), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for its preceding completed fiscal year, if-

(i) In the Contractor's preceding fiscal year, the Contractor received-

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the

Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

(2) First-tier subcontract information. Unless otherwise directed by the contracting officer, or as provided in paragraph (g) of this clause, by the end of the month following the month of award of a first-tier subcontract with a value of \$30,000 or more, the Contractor shall report the following information at <http://www.fsrs.gov> for that first tier subcontract. (The Contractor shall follow the instruction at <http://www.fsrs.gov> to report the data.)

- (i) Unique entity identifier for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.
- (ii) Name of the subcontractor.
- (iii) Amount of the subcontract award.
- (iv) Date of the subcontract award.
- (v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.
- (vi) Subcontract number (the subcontract number assigned by the Contractor).
- (vii) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
- (viii) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
- (ix) The prime contract number, and order number if applicable.
- (x) Awarding agency name and code.
- (xi) Funding agency name and code.
- (xii) Government contracting office code.
- (xiii) Treasury account symbol (TAS) as reported in FPDS.
- (xiv) The applicable North American Industry Classification System code (NAICS).

(3) Executive compensation of the first-tier subcontractor. Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract with a value of \$30,000 or more, and annually thereafter (calculated from the prime contract award date), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for that first-tier subcontractor for the first-tier subcontractor's preceding completed fiscal year at <https://www.fsrs.gov> , if-

- (i) In the subcontractor's preceding fiscal year, the subcontractor received-
 - (A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and
 - (B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

(e) The Contractor shall not split or break down first-tier subcontract awards to a value less than \$30,000 to avoid the reporting requirements in paragraph (d) of this clause.

(f) The Contractor is required to report information on a first-tier subcontract covered by paragraph (d) when the subcontract is awarded. Continued reporting on the same subcontract is not required unless one of the reported data elements changes during the performance of the subcontract. The Contractor is not required to make further reports after the first-tier subcontract expires.

(g)

(1) If the Contractor in the previous tax year had gross income, from all sources, under \$300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under \$300,000, the Contractor does not need to report awards for that subcontractor

(h) The FSRS database at <http://www.fsrs.gov> will be prepopulated with some information from SAM and the FPDS database. If FPDS information is incorrect, the contractor should notify the contracting officer. If the SAM information is incorrect, the contractor is responsible for correcting this information.

I.16 52.204-13 - System for Award Management Maintenance (Oct 2018)

(a) *Definition.* As used in this clause--

“Electronic Funds Transfer (EFT) indicator” means a four-character suffix to the unique entity identifier. The suffix is assigned at the discretion of the commercial, nonprofit, or Government entity to establish additional System for Award Management (SAM) records for identifying alternative EFT accounts (see subpart 32.11) for the same entity.

“Registered in the System for Award Management (SAM)” means that-

(1) The Contractor has entered all mandatory information, including the unique entity identifier and the EFT indicator (if applicable), the Commercial and Government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see subpart 4.14), into the SAM;

(2) The Contractor has completed the Core, Assertions, Representations and Certifications, and Points of Contact sections of the registration in the SAM;

(3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The Contractor will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and

(4) The Government has marked the record “Active”.

“System for Award Management (SAM)” means the primary Government repository for prospective Federal awardee and Federal awardee information and the centralized Government system for certain contracting, grants, and other assistance-related processes. It includes-

(1) Data collected from prospective Federal awardees required for the conduct of business with the Government;

(2) Prospective contractor-submitted annual representations and certifications in accordance with FAR subpart 4.12; and

(3) Identification of those parties excluded from receiving Federal contracts, certain subcontracts, and certain types of Federal financial and non-financial assistance and benefits.

“Unique entity identifier” means a number or other identifier used to identify a specific commercial, nonprofit, or Government entity. See www.sam.gov for the designated entity for establishing unique entity identifiers.

(b) If the solicitation for this contract contained the provision 52.204-7 with its Alternate I, and the Contractor was unable to register prior to award, the Contractor shall be registered in SAM within 30 days after award or before three days prior to submission of the first invoice, whichever occurs first.

(c) The Contractor shall maintain registration in SAM during contract performance and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement. The Contractor is responsible for the currency, accuracy and completeness of the data within SAM, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in SAM after the initial registration, the Contractor is required to review and update on an annual basis, from the date of initial registration or subsequent updates, its information in SAM to ensure it is current, accurate and complete. Updating information in SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(d)

(1)

(i) If a Contractor has legally changed its business name or “doing business as” name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to--

(A) Change the name in the SAM;

(B) Comply with the requirements of subpart 42.12 of the FAR; and

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor shall provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (d)(1)(i) of this clause, or fails to perform the agreement at paragraph (d)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the “Suspension of Payment” paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see FAR subpart 32.8, Assignment of Claims). Assignees shall be separately registered in SAM. Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the EFT clause of this contract.

(3) The Contractor shall ensure that the unique entity identifier is maintained with the entity designated at www.sam.gov for establishment of the unique entity identifier throughout the life of the contract. The Contractor shall communicate any change to the unique entity identifier to the Contracting Officer within 30 days after the change, so an appropriate modification can be issued to update the data on the contract. A change in the unique entity identifier does not necessarily require a novation be accomplished.

(e) Contractors may obtain additional information on registration and annual confirmation requirements at <https://www.sam.gov>.

I.17 52.204-14 - Service Contract Reporting Requirements (Oct 2016)

(a) *Definition.*

"First-tier subcontract" means a subcontract awarded directly by the Contractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect costs.

(b) The Contractor shall report, in accordance with paragraphs (c) and (d) of this clause, annually by October 31, for services performed under this contract during the preceding Government fiscal year (October 1-September 30).

(c) The Contractor shall report the following information:

(1) Contract number and, as applicable, order number.

(2) The total dollar amount invoiced for services performed during the previous Government fiscal year under the contract.

(3) The number of Contractor direct labor hours expended on the services performed during the previous Government fiscal year.

(4) Data reported by subcontractors under paragraph (f) of this clause.

(d) The information required in paragraph (c) of this clause shall be submitted via the internet at www.sam.gov. (See SAM User Guide). If the Contractor fails to submit the report in a timely manner, the contracting officer will exercise appropriate contractual remedies. In addition, the Contracting Officer will make the Contractor's failure to comply with the reporting requirements a part of the Contractor's performance information under FAR subpart 42.15.

(e) Agencies will review Contractor reported information for reasonableness and consistency with available contract information. In the event the agency believes that revisions to the Contractor reported information are warranted, the agency will notify the Contractor no later than November 15. By November 30, the Contractor shall revise the report or document its rationale for the agency.

(f)

(1) The Contractor shall require each first-tier subcontractor providing services under this contract, with subcontract(s) each valued at or above the thresholds set forth in 4.1703(a)(2), to provide the following detailed information to the Contractor in sufficient time to submit the report:

- (i) Subcontract number (including subcontractor name and unique entity identifier); and
- (ii) The number of first-tier subcontractor direct-labor hours expended on the services performed during the previous Government fiscal year.

(2) The Contractor shall advise the subcontractor that the information will be made available to the public as required by section 743 of Division C of the Consolidated Appropriations Act, 2010.

I.18 52.204-18 Commercial and Government Entity Code Maintenance (Jul 2016)

(a) *Definition.* As used in this clause-

“Commercial and government Entity (CAGE) code” means-

- (1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or Government entity, or
- (2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency (NSPA) to entities located outside the United States and its outlying areas that the DLA Commercial and Government Entity (CAGE) Branch records and maintains in the CAGE master file. This type of code is known as the NATO CAGE (NCAGE) code.

(b) Contractors shall ensure that the CAGE code is maintained throughout the life of the contract. For contractors registered in the System for Award Management (SAM), the DLA Commercial and Government Entity (CAGE) Branch shall only modify data received from SAM in the CAGE master file if the contractor initiates those changes via update of its SAM registration. Contractors undergoing a novation or change-of-name agreement shall notify the contracting officer in accordance with subpart 42.12. The contractor shall communicate any change to the CAGE code to the contracting officer within 30 days after the change, so that a modification can be issued to update the CAGE code on the contract.

(c) Contractors located in the United States or its outlying areas that are not registered in SAM shall submit written change requests to the DLA Commercial and Government Entity (CAGE) Branch. Requests for changes shall be provided at <https://cage.dla.mil> . Change requests to the CAGE master file are accepted from the entity identified by the code.

(d) Contractors located outside the United States and its outlying areas that are not registered in SAM shall contact the appropriate National Codification Bureau (points of contact available at <http://www.nato.int/structur/AC/135/main/links/contacts.htm>) or NSPA at <https://eportal.nspa.nato.int/AC135Public/scage/CageList.aspx>.

(e) Additional guidance for maintaining CAGE codes is available at <https://cage.dla.mil>.

I.19 52.204-19 - Incorporation by Reference of Representations and Certifications (Dec 2014)

The Contractor's representations and certifications, including those completed electronically via the System for Award Management (SAM), are incorporated by reference into the contract.

I.20 FAR 52.204-21, Basic Safeguarding of Covered Contractor Information Systems (Jun 2016)

(a) Definitions. As used in this clause -

“Covered contractor information system” means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

“Federal contract information” means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public websites) or simple transactional information, such as necessary to process payments.

“Information” means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

“Information system” means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information ([44 U.S.C. 3502](#)).

“Safeguarding” means measures or controls that are prescribed to protect information systems.

(b) Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

- (i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).
- (ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.
- (iii) Verify and control/limit connections to and use of external information systems.
- (iv) Control information posted or processed on publicly accessible information systems.
- (v) Identify information system users, processes acting on behalf of users, or devices.
- (vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.
- (vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.
- (viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.

- (ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.
 - (x) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.
 - (xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.
 - (xii) Identify, report, and correct information and information system flaws in a timely manner.
 - (xiii) Provide protection from malicious code at appropriate locations within organizational information systems.
 - (xiv) Update malicious code protection mechanisms when new releases are available.
 - (xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.
- (2) Other requirements. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.
- (c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial items, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

I.21 52.204-23-Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (Jul 2018)

Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (Jul 2018)

(a) Definitions. As used in this clause--

Covered article means any hardware, software, or service that--

- (1) Is developed or provided by a covered entity;
- (2) Includes any hardware, software, or service developed or provided in whole or in part by a covered entity; or
- (3) Contains components using any hardware or software developed in whole or in part by a covered entity.

Covered entity means--

- (1) Kaspersky Lab;
- (2) Any successor entity to Kaspersky Lab;
- (3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(4) Any entity of which Kaspersky Lab has a majority ownership.

(b) Prohibition. Section 1634 of Division A of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits Government use of any covered article. The Contractor is prohibited from--

(1) Providing any covered article that the Government will use

on or after October 1, 2018; and

(2) Using any covered article on or after October 1, 2018, in the development of data or deliverables first produced in the performance of the contract.

(c) Reporting requirement. (1) In the event the Contractor identifies a covered article provided to the Government during contract performance, or the Contractor is notified of such by a subcontractor at any tier or any other source, the Contractor shall report, in writing, to the Contracting Officer or, in the case of the Department of Defense, to the website at <https://dibnet.dod.mil/>. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at <https://dibnet.dod.mil/>.

(2) The Contractor shall report the following information pursuant to paragraph (c)(1) of this clause:

(i) Within 1 business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; brand; model number (Original Equipment Manufacturer (OEM) number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the report pursuant to paragraph (c)(1) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered article, any reasons that led to the use or submission of the covered article, and any additional efforts that will be incorporated to prevent future use or submission of covered articles.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for the acquisition of commercial items.

I.22 52.209-6 -- Protecting the Governments Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (Oct 2015)

(a) Definition. "Commercially available off-the-shelf (COTS) item," as used in this clause--

(1) Means any item of supply (including construction material) that is-

(i) A commercial item (as defined in paragraph (1) of the definition in FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

(b) The Government suspends or debar Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract in excess of \$35,000 with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless there is a compelling reason to do so.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed \$35,000, other than a subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

- (1) The name of the subcontractor.
- (2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM.
- (3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM.
- (4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial items, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each subcontract that-

- (1) Exceed \$35,000 in value; and
- (2) Is not a subcontract for commercially available off-the-shelf items.

I.23 52.209-9 - Updates of Publicly Available Information Regarding Responsibility Matters (Oct 2018)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management via <https://www.sam.gov>.

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consist of two segments-

- (1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by-
 - (i) Government personnel and authorized users performing business on behalf of the Government; or
 - (ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for--

- (i) Past performance reviews required by subpart 42.15;
- (ii) Information that was entered prior to April 15, 2011; or
- (iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

I.24 52.209-10 - Prohibition on Contracting With Inverted Domestic Corporations (Nov 2015)

(a) *Definitions.* As used in this clause--

"Inverted domestic corporation" means a foreign incorporated entity that meets the definition of an inverted domestic corporation under 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c).

"Subsidiary" means an entity in which more than 50 percent of the entity is owned-

- (1) Directly by a parent corporation; or
- (2) Through another subsidiary of a parent corporation.

(b) If the contractor reorganizes as an inverted domestic corporation or becomes a subsidiary of an inverted domestic corporation at any time during the period of performance of this contract, the Government may be prohibited from paying for Contractor activities performed after the date when it becomes an inverted domestic corporation or subsidiary. The Government may seek any available remedies in the event the Contractor fails to perform in accordance with the terms and conditions of the contract as a result of Government action under this clause.

(c) Exceptions to this prohibition are located at 9.108-2.

(d) In the event the Contractor becomes either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation during contract performance, the Contractor shall give written notice to the Contracting Officer within five business days from the date of the inversion event.

I.25 52.210-1 Market Research (Apr 2011)

(a) Definition. As used in this clause--

“Commercial item and nondevelopmental item” have the meaning contained in Federal acquisition Regulation 2.101.

(b) Before awarding subcontracts over the simplified acquisition threshold for items other than commercial items, the Contractor shall conduct market research to--

(1) Determine if commercial items or, to the extent commercial items suitable to meet the agency's needs are not available, nondevelopmental items are available that-

(i) Meet the agency's requirements;

(ii) Could be modified to meet the agency's requirements; or

(iii) Could meet the agency's requirements if those requirements were modified to a reasonable extent; and

(2) Determine the extent to which commercial items or nondevelopmental items could be incorporated at the component level.

I.26 52.215-2 -- Audit and Records - Negotiation (Oct 2010)

(a) As used in this clause, “records” includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) *Examination of costs.* If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) *Certified cost or pricing data.* If the Contractor has been required to submit certified cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to --

(1) The proposal for the contract, subcontract, or modification;

(2) The discussions conducted on the proposal(s), including those related to negotiating;

(3) Pricing of the contract, subcontract, or modification; or

(4) Performance of the contract, subcontract or modification.

(d) *Comptroller General-*

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any current employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) *Reports.* If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating --

(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) *Availability.* The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition --

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and --

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which certified cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

I.27 52.215-8 -- Order of Precedence -- Uniform Contract Format (Oct 1997)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

(a) The Schedule (excluding the specifications).

(b) Representations and other instructions.

(c) Contract clauses.

(d) Other documents, exhibits, and attachments.

(e) The specifications.

I.28 52.215-10 -- Price Reduction for Defective Certified Cost or Pricing Data (Aug 2011)

(a) If any price, including profit or fee, negotiated in connection with this contract, or any cost reimbursable under this contract, was increased by any significant amount because --

(1) The Contractor or a subcontractor furnished certified cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) A subcontractor or prospective subcontractor furnished the Contractor certified cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) Any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction.

(b) Any reduction in the contract price under paragraph (a) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective certified cost or pricing data.

(c)

(1) If the Contracting Officer determines under paragraph (a) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current certified cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the certified cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)

(i) Except as prohibited by subdivision (c)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if --

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the certified cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if --

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(d) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid --

(1) Interest compounded daily, as required by 26 U.S.C. 6622, on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted certified cost or pricing data that were incomplete, inaccurate, or noncurrent.

I.29 52.215-11 -- Price Reduction for Defective Certified Cost or Pricing Data - Modifications (Aug 2011)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because

(1) the Contractor or a subcontractor furnished certified cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data,

(2) a subcontractor or prospective subcontractor furnished the Contractor certified cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or

(3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective certified cost or pricing data.

(d)

(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current certified cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the certified cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)

(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if --

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the certified cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if --

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the

Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid --

(1) Interest compounded daily, as required by 26 U.S.C. 6622, on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted certified cost or pricing data that were incomplete, inaccurate, or noncurrent.

I.30 52.215-12 Subcontractor Certified Cost or Pricing Data (Deviation 2018-O0015) (MAY 2018)

(a) Unless an exception under FAR 15.403-1 applies, the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price) -

(1) Before awarding any subcontract expected to exceed \$750,000 prior to July 1, 2018, or modifying any subcontract that was awarded prior to July 1, 2018, involving a pricing adjustment expected to exceed \$750,000, or

(2) Before awarding any subcontract expected to exceed \$2 million on or after July 1, 2018, or modifying any subcontract that was awarded on or after July 1, 2018, involving a pricing adjustment expected to exceed \$2 million.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that exceeds the threshold for submission of certified cost or pricing data at FAR 15.403-4, when entered into, the Contractor shall insert either-

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of certified cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Certified Cost or Pricing Data-Modifications (DEVIATION 2018-O0015).

I.31 52.215-13 Subcontractor Certified Cost or Pricing Data-Modifications (Deviation 2018-O0015) (MAY 2018)

(a) The requirements of paragraphs (b) and (c) of this clause shall-

(1) Become operative only for any modification of a subcontract that was awarded prior to July 1, 2018, involving a pricing adjustment expected to exceed \$750,000, or any modification of a subcontract that awarded on or after July 1, 2018, involving a pricing adjustment expected to exceed \$2 million; and

(2) Be limited to such modifications.

(b) Unless an exception under FAR 15.403-1 applies, the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price)-

(1) Before modifying any subcontract that was awarded prior to July 1, 2018, involving a pricing adjustment expected to exceed \$750,000, or

(2) Before modifying any subcontract that was awarded on or after July 1, 2018, involving a pricing adjustment expected to exceed \$2 million.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds \$2 million.

I.32 52.215-14 -- Integrity of Unit Prices (Oct 2010)

(a) Any proposal submitted for the negotiation of prices for items of supplies shall distribute costs within contracts on a basis that ensures that unit prices are in proportion to the items' base cost (e.g., manufacturing or acquisition costs). Any method of distributing costs to line items that distorts unit prices shall not be used. For example, distributing costs equally among line items is not acceptable except when there is little or no variation in base cost. Nothing in this paragraph requires submission of certified cost or pricing data not otherwise required by law or regulation.

(b) When requested by the Contracting Officer, the Offeror/Contractor shall also identify those supplies that it will not manufacture or to which it will not contribute significant value.

(c) The Contractor shall insert the substance of this clause, less paragraph (b), in all subcontracts for other than: acquisitions at or below the simplified acquisition threshold in FAR Part 2; construction or architect-engineer services under FAR Part 36; utility services under FAR Part 41; services where supplies are not required; commercial items; and petroleum products.

I.33 52.215-15 -- Pension Adjustments and Asset Reversions (Oct 2010)

(a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.

(b) For segment closings, pension plan terminations, or curtailment of benefits, the adjustment amount shall be-

(1) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99), the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12); and

(2) For contracts and subcontracts that are not subject to full coverage under CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12), except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) shall be the

sum of the pension plan costs allocated to all non-CAS covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) Subpart 31.2 or for which certified cost or pricing data were submitted.

(c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which certified cost or pricing data were submitted or that are subject to FAR [Subpart 31.2](#).

(d) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR [15.408\(g\)](#).

I.34 52.215-17 -- Waiver of Facilities Capital Cost of Money (Oct 1997)

The Contractor did not include facilities capital cost of money as a proposed cost of this contract. Therefore, it is an unallowable cost under this contract.

I.35 52.215-18 -- Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (Jul 2005)

(a) The Contractor shall promptly notify the Contracting Officer in writing when the Contractor determines that it will terminate or reduce the benefits of a PRB plan.

(b) If PRB fund assets revert or inure to the Contractor, or are constructively received by it under a plan termination or otherwise, the Contractor shall make a refund or give a credit to the Government for its equitable share as required by 31.205-6(o)(5) of the Federal Acquisition Regulation (FAR). When determining or agreeing on the method for recovery of the Government's equitable share, the contracting parties should consider the following methods: cost reduction, amortizing the credit over a number of years (with appropriate interest), cash refund, or some other agreed upon method. Should the parties be unable to agree on the method for recovery of the Government's equitable share, through good faith negotiations, the Contracting Officer shall designate the method of recovery.

(c) The Contractor shall insert the substance of this clause in all subcontracts that meet the applicability requirements of FAR 15.408(j).

I.36 52.215-19 -- Notification of Ownership Changes (Oct 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall --

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

(c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

I.37 52.215-21 -- Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data - Modifications (Oct 2010)

(a) *Exceptions from certified cost or pricing data.*

(1) In lieu of submitting certified cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable --

(i) *Identification of the law or regulation establishing the price offered.* If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) *Information on modifications of contracts or subcontracts for commercial items.*

(A) If --

(1) The original contract or subcontract was granted an exception from certified cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include --

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original

equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) *Requirements for certified cost or pricing data.* If the Contractor is not granted an exception from the requirement to submit certified cost or pricing data, the following applies:

(1) The Contractor shall submit certified cost or pricing data, data other than certified cost or pricing data, and supporting attachments in accordance with the instruction contained in Table 15-2 of FAR 15.408, which is incorporated by reference with the same force and effect as though it were inserted here in full text. The instructions in Table 15-2 are incorporated as a mandatory format to be used in this contract, unless the Contracting Officer and the Contractor agree to a different format and change this clause to use Alternate I.

(2) As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

1.38 52.215-23 - Limitations on Pass-Through Charges (Oct 2009)

(a) *Definitions.* As used in this clause--

"Added value" means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

"Excessive pass-through charge," with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

"No or negligible value" means the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

“Subcontract” means any contract, as defined in FAR 2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

“Subcontractor,” as defined in FAR 44.101, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) *General*. The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) *Reporting*. Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if-

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) *Recovery of excessive pass-through charges*. If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR subpart 31.2; and

(2) For applicable DoD fixed-price contracts, as identified in 15.408(n)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) *Access to records*.

(1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) *Flowdown*. The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that exceed the simplified acquisition threshold, except if the contract is with DoD, then insert in all cost-reimbursement subcontracts and fixed-price subcontracts, except those identified in 15.408(n)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in accordance with FAR 15.403-4.

1.39 52.216-7 -- Allowable Cost and Payment (Aug 2018)

(a) *Invoicing*.

(1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2

weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) Subpart 31.2 in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) Reimbursing costs.

(1) For the purpose of reimbursing allowable costs (except as provided in subparagraph (b)(2) of this clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term "costs" includes only --

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for --

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made-

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government;

(B) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

(F) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check or other form of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) of this clause, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) of this clause.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) *Small business concerns.* A small business concern may receive more frequent payments than every 2 weeks

(d) *Final indirect cost rates.*

(1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2)

(i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

(A) Summary of all claimed indirect expense rates, including pool, base, and calculated indirect rate.

(B) *General and Administrative expenses (final indirect cost pool).* Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts).

(C) *Overhead expenses (final indirect cost pool).* Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) for each final indirect cost pool.

(D) *Occupancy expenses (intermediate indirect cost pool).* Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) and expense reallocation to final indirect cost pools.

(E) Claimed allocation bases, by element of cost, used to distribute indirect costs.

(F) Facilities capital cost of money factors computation.

(G) Reconciliation of books of account (*i.e.*, General Ledger) and claimed direct costs by major cost element.

(H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.

(I) Schedule of cumulative direct and indirect costs claimed and billed by contract and subcontract.

(J) *Subcontract information*. Listing of subcontracts awarded to companies for which the contractor is the prime or upper-tier contractor (include prime and subcontract numbers; subcontract value and award type; amount claimed during the fiscal year; and the subcontractor name, address, and point of contact information).

(K) Summary of each time-and-materials and labor-hour contract information, including labor categories, labor rates, hours, and amounts; direct materials; other direct costs; and, indirect expense applied at claimed rates.

(L) Reconciliation of total payroll per IRS form 941 to total labor costs distribution.

(M) Listing of decisions/agreements/approvals and description of accounting/organizational changes.

(N) Certificate of final indirect costs (see 52.242-4, Certification of Final Indirect Costs).

(O) Contract closing information for contracts physically completed in this fiscal year (include contract number, period of performance, contract ceiling amounts, contract fee computations, level of effort, and indicate if the contract is ready to close).

(iv) The following supplemental information is not required to determine if a proposal is adequate, but may be required during the audit process:

(A) Comparative analysis of indirect expense pools detailed by account to prior fiscal year and budgetary data.

(B) General organizational information and limitation on allowability of compensation for certain contractor personnel. See 31.205-6(p). Additional salary reference information is available at <https://www.whitehouse.gov/wp-content/uploads/2017/11/ContractorCompensationCapContractsAwardedBeforeJune24.pdf> and <https://www.whitehouse.gov/wp-content/uploads/2017/11/ContractorCompensationCapContractsAwardedafterJune24.pdf>.

(C) Identification of prime contracts under which the contractor performs as a subcontractor.

(D) Description of accounting system (excludes contractors required to submit a CAS Disclosure Statement or contractors where the description of

the accounting system has not changed from the previous year's submission).

(E) Procedures for identifying and excluding unallowable costs from the costs claimed and billed (excludes contractors where the procedures have not changes from the previous year's submission).

(F) Certified financial statements and other financial data (e.g., trial balance, compilation, review, etc).

(G) Management letter from outside CPAs concerning any internal control weaknesses.

(H) Actions that have been and/or will be implemented to correct the weaknesses described in the management letter from subparagraph (G) of this section.

(I) List of all internal audit reports issued since the last disclosure of internal audit reports to the Government.

(J) Annual internal audit plan of scheduled audits to be performed in the fiscal year when the final indirect cost rate submission is made.

(K) Federal and State income tax returns.

(L) Securities and Exchange Commission 10-K annual report.

(M) Minutes from board of directors meetings.

(N) Listing of delay claims and termination claims submitted which contain costs relating to the subject fiscal year.

(O) Contract briefings, which generally include a synopsis of all pertinent contract provisions, such as: Contract type, contract amount, product or service(s) to be provided, contract performance period, rate ceilings, advance approval requirements, pre-contract cost allowability limitations, and billing limitations.

(v) The Contractor shall update the billings on all contracts to reflect the final settled rates and update the schedule of cumulative direct and indirect costs claimed and billed, as required in paragraph (d)(2)(iii)(l) of this sections, within 60 days after settlement of final indirect cost rates.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify

(i) the agreed-upon final annual indirect cost rates,

(ii) the bases to which the rates apply,

(iii) the periods for which the rates apply,

(iv) any specific indirect cost items treated as direct costs in the settlement, and

(v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates.

The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates. The completion invoice or voucher shall include settled subcontract amounts and rates. The prime contractor is responsible for settling subcontractor amounts and rates included in the completion invoice or voucher and providing status of subcontractor audits to the contracting officer upon request.

(6)

(i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may--

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) *Billing rates.* Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates --

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) *Quick-closeout procedures.* Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) *Audit.* At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be --

(1) Reduced by amounts found by the Contracting Officer not to constitute allowable costs; or

(2) Adjusted for prior overpayments or underpayments.

(h) *Final payment.*

(1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver --

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except --

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

I.40 52.216-12 -- Cost-Sharing Contract -- No Fee (Apr 1984)

(a) The Government shall not pay to the Contractor a fee for performing this contract.

(b) After paying 80 percent of the Government's share of the total estimated cost of performance shown in the Schedule, the Contracting Officer may withhold further payment of allowable cost until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed one percent of the Government's share of the total estimated cost shown in the Schedule or \$100,000, whichever is less.

I.41 52.219-6 Notice of Total Small Business Set-Aside (Nov 2011)

(a) *Definition.* "Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) *Applicability.* This clause applies only to--

(1) Contracts that have been totally set aside or reserved for small business concerns; and

(2) Orders set aside for small business concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).*

(c) *General.*

(1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(d) *Agreement*. A small business concern submitting an offer in its own name shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply to construction or service contracts.

(End of Clause)

I.42 52.219-14 Limitations on Subcontracting (Jan 2017)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) *Applicability*. This clause applies only to--

(1) Contracts that have been set aside or reserved for small business concerns or 8(a) participants;

(2) Part or parts of a multiple-award contract that have been set aside for small business concerns or 8(a) participants; and

(3) Orders set aside for small business or 8(a) participants under multiple-award contracts as described in [8.405-5](#) and [16.505\(b\)\(2\)\(i\)\(F\)](#).

(c) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for --

(1) *Services (except construction)*. At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) *Supplies (other than procurement from a nonmanufacturer of such supplies)*. The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) *General construction*. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) *Construction by special trade contractors*. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

(End of Clause)

I.43 52.219-28 Post-Award Small Business Program Rerepresentation (Jul 2013)

(a) *Definitions*. As used in this clause--

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern means a concern, including its affiliates that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is “not dominant in its field of operation” when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts-

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at <http://www.sba.gov/content/table-small-business-size-standards> .

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

The Contractor represents that it [] is, [] is not a small business concern under NAICS Code _____ assigned to contract number _____. [Contractor to sign and date and insert authorized signer's name and title].

(End of clause)

I.44 52.219-8 -- Utilization of Small Business Concerns (Oct 2018)

(a) *Definitions.* As used in this contract--

"HUBZone small business concern" means a small business concern, certified by the Small Business Administration, that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

"Service-disabled veteran-owned small business concern"--

(1) Means a small business concern-

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) "Service-disabled veteran" means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

"Small disadvantaged business concern, consistent with 13 CFR 124.1002," means a small business concern under the size standard applicable to the acquisition, that--

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by--

(i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13.CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

"Veteran-owned small business concern" means a small business concern-

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(b) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(c) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(d)

(1) The Contractor may accept a subcontractor's written representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.

(2) The Contractor may accept a subcontractor's representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business in the System for Award Management (SAM) if--

(i) The subcontractor is registered in SAM; and

(ii) The subcontractor represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.

(3) The Contractor may not require the use of SAM for the purposes of representing size or socioeconomic status in connection with a subcontract.

(4) In accordance with 13 CFR 121.411, 124.1015, 125.29, 126.900, and 127.700, a contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(5) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management or by contacting the SBA. Options for contacting the SBA include-

(i) HUBZone small business database search application Web page at http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm ; or <http://www.sba.gov/hubzone> ;

(ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington DC 20416; or

(iii) The SBA HUBZone Help Desk at hubzone@sba.gov .

(End of clause)

I.45 52.222-1 -- Notice to the Government of Labor Disputes (Feb 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

I.46 52.222-2 -- Payment for Overtime Premiums (Jul 1990)

(a) The use of overtime is authorized under this contract if the overtime premium does not exceed 10% for all Contractor labor or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall --

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.

I.47 52.222-3 -- Convict Labor (June 2003)

(a) Except as provided in paragraph (b) of this clause, the Contractor shall not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons--

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

I.48 52.222-4 -- Contract Work Hours and Safety Standards -- Overtime Compensation (May 2018)

(a) *Overtime requirements.* No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation [22.300](#)) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) *Violation; liability for unpaid wages; liquidated damages.* The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate specified at 29 CFR 5.5(b)(2) per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37). In accordance with the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 2461 Note), the Department of Labor adjusts this civil monetary penalty for inflation no later than January 15 each year.

(c) *Withholding for unpaid wages and liquidated damages.* The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute.

(d) *Payrolls and basic records.*

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) *Subcontracts.* The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower-tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

I.49 52.222-6 - Construction Wage Rate Requirements (Aug 2018)

(a) *Definition.*-“Site of the work”-

(1) Means--

(i) *The primary site of the work.* The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) *The secondary site of the work, if any.* Any other site where a significant portion of the building or work is constructed, provided that such site is-

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided-

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the “primary site of the work” as defined in paragraph (a)(1)(i), or the “secondary site of the work” as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in

operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of bids and not on the Project site, are not included in the "site of the work." Such permanent, previously established facilities are not a part of the "site of the work" even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b)

(1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work shall be effective from the first day on which work under the contract was performed at that site and shall be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work shall be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Construction Wage Rate Requirements statute on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(3) Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Construction Wage Rate Requirements (Davis-Bacon Act) poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(c)

(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall

be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination.
- (ii) The classification is utilized in the area by the construction industry.
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the:

Wage and Hour Division

U.S. Department of Labor

Washington, DC 20210

The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (c)(2) and (c)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(d) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(e) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Construction Wage Rate Requirements statute have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

I.50 52.222-7 -- Withholding of Funds (May 2014)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other federally assisted contract subject to prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

I.51 52.222-8 -- Payrolls and Basic Records (Aug 2018)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) (Construction Wage Rate Requirement statute)), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Construction Wage Rate Requirements, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B), the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)

(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be obtained from the U.S. Department of Labor Wage and Hour Division website at <http://www.dol.gov/whd/forms/wh347.pdf>. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Contracting Officer, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or

audit of compliance with prevailing wage requirements. It is not a violation of this section for a Prime Contractor to require a subcontractor to provide addresses and social security numbers to the Prime Contractor for its own records, without weekly submission to the Contracting Officer.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify --

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

I.52 52.222-9 -- Apprentices and Trainees (Jul 2005)

(a) *Apprentices.*

(1) An apprentice will be permitted to work at less than the predetermined rate for the work they performed when they are employed-

(i) Pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer, and Labor Services (OATELS) or with a State Apprenticeship Agency recognized by the OATELS; or

(ii) In the first 90 days of probationary employment as an apprentice in such an apprenticeship program, even though not individually registered in the program, if certified by the OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program.

(3) Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(1) of this clause, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.

(5) Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(6) In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) *Trainees.*

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS). The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by OATELS.

(2) Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not

registered and participating in a training plan approved by the OATELS shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed.

(3) In the event OATELS withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) *Equal employment opportunity.* The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

I.53 52.222-10 -- Compliance with Copeland Act Requirements (Feb 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

I.54 52.222-11 -- Subcontracts (Labor Standards) (May 2014)

(a) *Definition.* "Construction, alteration or repair," as used in this clause means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation-

- (1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-site;
- (2) Painting and decorating;
- (3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;
- (4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the "site of the work" as defined in the FAR clause at 52.222-6, Construction Wage Rate Requirements of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the "site of the work" definition; and
- (5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the "site of the work" definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the "site of the work" definition).

(b) The Contractor or subcontractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled-

- (1) Construction Wage Rate Requirements;
- (2) Contract Work Hours and Safety Standards -- Overtime Compensation (if the clause is included in this contract);
- (3) Apprentices and Trainees;
- (4) Payrolls and Basic Records;

- (5) Compliance with Copeland Act Requirements;
- (6) Withholding of Funds;
- (7) Subcontracts (Labor Standards);
- (8) Contract Termination - Debarment;
- (9) Disputes Concerning Labor Standards;
- (10) Compliance with Construction Wage Rate Requirements and Related Regulations; and
- (11) Certification of Eligibility.

(c) The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d)

(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

I.55 52.222-12 -- Contract Termination - Debarment (May 2014)

A breach of the contract clauses entitled Construction Wage Rate Requirements, Contract Work Hours and Safety Standards -- Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Construction Wage Rate Requirements and Related Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

I.56 52.222-13 -- Compliance with Construction Wage Rate Requirements and Related Regulations (May 2014)

All rulings and interpretations of the Construction Wage Rate Requirements and related statutes contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

I.57 52.222-14 -- Disputes Concerning Labor Standards (Feb 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

I.58 52.222-15 -- Certification of Eligibility (May 2014)

(a) By entering into this contract, the Contractor certifies that neither it nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

I.59 52.222-16 -- Approval of Wage Rates (May 2014)

All straight time wage rates, and overtime rates based thereon, for laborers and mechanics engaged in work under this contract must be submitted for approval in writing by the head of the contracting activity or a representative expressly designated for this purpose, if the straight time wages exceed the rates for corresponding classifications contained in the applicable Construction Wage Rate Requirements minimum wage determination included in the contract. Any amount paid by the Contractor to any laborer or mechanic in excess of the agency approved wage rate shall be at the expense of the Contractor and shall not be reimbursed by the Government. If the Government refuses to authorize the use of the overtime, the Contractor is not released from the obligation to pay employees at the required overtime rates for any overtime actually worked.

I.60 52.222-21 -- Prohibition of Segregated Facilities (Apr 2015)

(a) *Definitions.* As used in this clause--

"Gender identity" has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html .

"Segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between sexes.

"Sexual orientation" has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html .

(b) The contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in the contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

I.61 52.222-26 -- Equal Opportunity (Sep 2016)

(a) *Definitions.* As used in this clause--

“Compensation” means any payments made to, or on behalf of, an employee or offered to an applicant as remuneration for employment, including but not limited to salary, wages, overtime pay, shift differentials, bonuses, commissions, vacation and holiday pay, allowances, insurance and other benefits, stock options and awards, profit sharing, and retirement.

“Compensation information” means the amount and type of compensation provided to employees or offered to applicants, including, but not limited to, the desire of the Contractor to attract and retain a particular employee for the value the employee is perceived to add to the Contractor’s profit or productivity; the availability of employees with like skills in the marketplace; market research about the worth of similar jobs in the relevant marketplace; job analysis, descriptions, and evaluations; salary and pay structures; salary surveys; labor union agreements; and Contractor decisions, statements and policies related to setting or altering employee compensation.

“Essential job functions” means the fundamental job duties of the employment position an individual holds. A job function may be considered essential if-

- (1) The access to compensation information is necessary in order to perform that function or another routinely assigned business task; or
- (2) The function or duties of the position include protecting and maintaining the privacy of employee personnel records, including compensation information.

“Gender identity” has the meaning given by the Department of Labor’s Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html .

“Sexual orientation” has the meaning given by the Department of Labor’s Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html .

“United States” means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b)

(1) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(2) If the Contractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Contractor’s activities (41 CFR 60-1.5).

(c)

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. However, it shall not be a violation of this clause for the Contractor to

extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. This shall include, but not be limited to --

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion;
- (v) Transfer;
- (v) Recruitment or recruitment advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(5)

(i) The Contractor shall not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This prohibition against discrimination does not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(ii) The Contractor shall disseminate the prohibition on discrimination in paragraph (c)(5)(i) of this clause, using language prescribed by the Director of the Office of Federal Contract Compliance Programs (OFCCP), to employees and applicants by--

(A) Incorporation into existing employee manuals or handbooks; and

(B) Electronic posting or by posting a copy of the provision in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(7) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(8) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(9) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the (OFCCP) for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(10) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, in the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.

(11) The Contractor shall include the terms and conditions of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(12) The Contractor shall take such action with respect to any subcontract or purchase order as the Director of OFCCP may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(d) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR part 60-1.

I.62 FAR 52.222-35, Equal Opportunity for Veterans (OCT 2015)

(a) Definitions. As used in this clause-

“Active duty wartime or campaign badge veteran,” “Armed Forces service medal veteran,”

“disabled veteran,” “protected veteran,” “qualified disabled veteran,” and “recently separated veteran” have the meanings given at FAR 22.1301.

- (b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.
- (c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

I.63 FAR 52.222-36, Equal Opportunity for Workers with Disabilities (JUL 2014)

- (a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.
- (b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings

I.64 52.222-37 -- Employment Reports on Veterans (Feb 2016)

- (a) *Definitions.* As used in this clause, “active duty wartime or campaign badge veteran,” “Armed Forces service medal veteran,” “disabled veteran,” “protected veteran,” and “recently separated veteran,” have the meanings given in FAR 22.1301.
- (b) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--
 - (1) The total number of employees in the contractor's workforce, by job category and hiring location, who are protected veterans (*i.e.*, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans);
 - (2) The total number of new employees hired during the period covered by the report, and of the total, the number of protected veterans (*i.e.*, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans); and
 - (3) The maximum number and minimum number of employees of the Contractor or subcontractor at each hiring location during the period covered by the report.
- (c) The Contractor shall report the above items by filing the VETS-4212 “Federal Contractor Veterans’ Employment Report” (see “VETS-4212 Federal Contractor Reporting” and “Filing Your VETS-4212 Report” at <http://www.dol.gov/vets/vets4212.htm>).
- (d) The Contractor shall file VETS-4212 Reports no later than September 30 of each year.

(e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause shall reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report. Contractors may select an ending date--

(1) As of the end of any pay period between July 1 and August 31 of the year the report is due; or

(2) As of December 31, if the Contractor has prior written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(f) The number of veterans reported must be based on data known to the contractor when completing the VETS-4212. The contractor's knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self-identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the contractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C. 4212.

(g) The Contractor shall insert the terms of this clause in subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

I.65 52.222-40 - Notification of Employee Rights Under the National Labor Relations Act (Dec 2010)

(a) During the term of this contract, the Contractor shall post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the national Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2(d) and (f).

(1) Physical posting of the employee notice shall be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor shall also post the required notice electronically by displaying prominently, on any Web site that is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required employee notice, printed by the Department of Labor, may be-

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-management Standards Web site at <http://www.dol.gov/olms/regs/compliance/EO13496.htm> ; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor shall comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (f), in every subcontract that exceeds \$10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor shall take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

I.66 52.222-41 -- Service Contract Labor Standards (Aug 2018)

(a) *Definitions.* As used in this clause-

“Contractor” when this clause is used in any subcontract, shall be deemed to refer to the subcontractor, except in the term “Government Prime Contractor.”

“Service employee” means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) *Applicability.* This contract is subject to the following provisions and to all other applicable provisions of 41 U.S.C. chapter 67, Service Contract Labor Standards, and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 6702, as interpreted in Subpart C of 29 CFR Part 4.

(c) *Compensation.*

(1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)

(i) If a wage determination is attached to this contract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a

reasonable relationship (*i.e.*, appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent information to the Wage and Hour Division, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)

(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determinations issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (*i.e.*, adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c)(2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the

date such class of employees commenced contract work shall be a violation of the Service Contract Labor Standards statute and this contract.

(vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) *Adjustment of compensation.* If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) *Obligation to furnish fringe benefits.* The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) *Minimum wage.* In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

(f) *Successor contracts.* If this contract succeeds a contract subject to the Service Contract Labor Standards statute under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts 6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Administrative Review Board, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) *Notification to employees.* The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the worksite. Failure to comply with this requirement is a violation of 41 U.S.C. 6703 and of this contract.

(h) *Safe and sanitary working conditions.* The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(i) *Records.*

(1) The Contractor and each subcontractor performing work subject to the Service Contract Labor Standards statute shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, a record of the following:

(i) For each employee subject to the Service Contract Labor Standards statute--

(A) Name and address and social security number;

(B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation;

(C) Daily and weekly hours worked by each employee; and

(D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.

(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(j) *Pay periods.* The Contractor shall unconditionally pay to each employee subject to the Service Contract Labor Standards statute all wages due free and clear and without subsequent deduction (except as otherwise provided by law or regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this statute may not be of any duration longer than semi-monthly.

(k) *Withholding of payments and termination of contract.* The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with

the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Service Contract Labor Standards statute all or part of the wages or fringe benefits due under the Service Contract Labor Standards statute, the Contracting Officer may, after authorization or by direction of the Department of Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(l) *Subcontracts*. The Contractor agrees to insert this clause in all subcontracts subject to the Service Contract Labor Standards statute.

(m) *Collective bargaining agreements applicable to service employees*. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(n) *Seniority list*. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) *Rulings and interpretations*. Rulings and interpretations of the Service Contract Labor Standards statute are contained in Regulations, 29 CFR Part 4.

(p) *Contractor's certification*.

(1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under 41 U.S.C. 6706.

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under 41 U.S.C. 6706.

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(q) *Variations, tolerances, and exemptions involving employment*. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to 41 U.S.C. 6707 prior to its amendment by Pub.L.92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wage otherwise required by 41 U.S.C. 6703(1) without diminishing any fringe benefits or cash payments in lieu thereof required under section 41 U.S.C. 6703(2), in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, persons with disabilities, and disabled clients of work centers under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR Parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the statute for the employment of apprentices, student-learners, persons with disabilities, or disabled clients of work centers not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two statutes, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR Parts 525 and 528.

(r) *Apprentices.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Office of Apprenticeship Training, Employer, and Labor Services (OATELS), U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(s) *Tips.* An employee engaged in an occupation in which the employee customarily and regularly receives more than \$30 a month in tips may have the amount of these tips credited by the employer against the minimum wage required by 41 U.S.C. 6703(1), in accordance with section 3(m) of the Fair Labor Standards Act and Regulations, 29 CFR Part 531. However, the amount of credit shall not exceed \$1.34 per hour beginning January 1, 1981. To use this provision --

- (1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized;
- (2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received);
- (3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Labor Standards minimum wage through the combination of direct wages and tip credit; and
- (4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of 41 U.S.C. 6707(c).

(t) *Disputes concerning labor standards.* The U.S. Department of Labor has set forth in 29 CFR Parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

I.67 FAR 52.222-42, Statement of Equivalent Rates for Federal Hires (May 2014)

In compliance with the Service Contract Labor Standards statute and the regulations of the Secretary of Labor (29 CFR part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only:

It is not a Wage Determination.

Classifications	Grade	Equivalent Pay
Administrative Assistant	GS-7	19.89
Carpenter	WG-9	24.33
Computer Operator	GS-6	17.90
Electrician	WG-10	24.68
Engineering Technician	GS-9	24.33
Environmental Technician	GS-7	19.89
Forklift Operator	WG-5	18.48
Heavy Equipment Operator	WG-10	24.68
Instrument Mechanic	WG-10	24.68
Janitor	WG-2	14.16
Laborer	WG-2	14.16
Motor Vehicle Operator	WG-7	20.91
Painter	WG-9	23.42
Pipefitter	WG-10	24.68
Receiving Clerk	WG-4	17.12
Secretary	GS-6	17.90
Technical Writer	GS-9	24.33
Truck Driver	WG-8	22.27
Welder	WG-10	24.68

The fringe benefit rate is \$4.41/hour which is in addition to the above hourly rates.

I.68 52.222-43 -- Fair Labor Standards Act and Service Contract Labor Standards -- Price Adjustment (Multiple Year and Option Contracts (Aug 2018))

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to collective bargaining agreements.

(b) The Contractor warrants that the prices in this contract do not include any allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(c) The wage determination, issued under the Service Contract Labor Standards statute, (41 U.S.C. chapter 67), by the Administrator, Wage and Hour Division, U.S. Department of Labor, current on the anniversary date of a multiple year contract or the beginning of each renewal option period, shall apply to this contract. If no such determination has been made applicable to this contract, then the Federal minimum wage as established by section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended, (29 U.S.C. 206) current on the anniversary date of a multiple year contract or the beginning of each renewal option period, shall apply to this contract.

(d) The contract price, contract unit price labor rates, or fixed hourly labor rates will be adjusted to reflect the Contractor's actual increase or decrease in applicable wages and fringe benefits to the extent that the increase is made to comply with or the decrease is voluntarily made by the Contractor as a result of:

(1) The Department of Labor wage determination applicable on the anniversary date of the multiple year contract, or at the beginning of the renewal option period. For example, the prior year wage determination required a minimum wage rate of \$4.00 per hour. The Contractor chose to pay \$4.10. The new wage determination increases the minimum rate to \$4.50 per hour. Even if the Contractor voluntarily increases the rate to \$4.75 per hour, the allowable price adjustment is \$.40 per hour;

(2) An increased or decreased wage determination otherwise applied to the contract by operation of law; or

(3) An amendment to the Fair Labor Standards Act of 1938 that is enacted after award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(e) Any adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (d) of this clause, and the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance, but shall not otherwise include any amount for general and administrative costs, overhead, or profit.

(f) The Contractor shall notify the Contracting Officer of any increase claimed under this clause within 30 days after receiving a new wage determination unless this notification period is extended in writing by the Contracting Officer. The Contractor shall promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice shall contain a statement of the amount claimed and the change in fixed hourly rates (if this is a time-and-materials or labor-hour contract), and any relevant supporting data, including payroll records, that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price, contract unit price labor rates, or fixed hourly rates shall be modified in writing. The Contractor shall continue performance pending agreement on or determination of any such adjustment and its effective date.

(g) The Contracting Officer or an authorized representative shall have access to and the right to examine any directly pertinent books, documents, papers and records of the Contractor until the expiration of 3 years after final payment under the contract.

I.69 52.222-50 -- Combating Trafficking in Persons (Jan 2019)

(a) *Definitions.* As used in this clause-

"Agent" means any individual, including a director, an officer, an employee, or an independent contractor, authorized to act on behalf of the organization.

"Coercion" means-

(1) Threats of serious harm to or physical restraint against any person;

(2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

(3) The abuse or threatened abuse of the legal process.

"Commercial sex act" means any sex act on account of which anything of value is given to or received by any person.

"Commercially available off-the-shelf (COTS) item" means--

(1) Any item of supply (including construction material) that is-

- (i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);
- (ii) Sold in substantial quantities in the commercial marketplace; and
- (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

“Debt bondage” means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

“Employee” means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

“Forced labor” means knowingly providing or obtaining the labor or services of a person-

- (1) By threats of serious harm to, or physical restraint against, that person or another person;
- (2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or
- (3) By means of the abuse or threatened abuse of law or the legal process.

“Involuntary servitude” includes a condition of servitude induced by means of-

- (1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or
- (2) The abuse or threatened abuse of the legal process.

“Recruitment fees” means- Fees of any type, including charges, costs, assessments, or other financial obligations, that are associated with the recruiting process, regardless of the time, manner, or location of imposition or collection of the fee.

(1) Recruitment fees include, but are not limited to, the following fees (when they are associated with the recruiting process) for--

(i) Soliciting, identifying, considering, interviewing, referring, retaining, transferring, selecting, training, providing orientation to, skills testing, recommending, or placing employees or potential employees;

(ii) Advertising;

(iii) Obtaining permanent or temporary labor certification, including any associated fees;

(iv) Processing applications and petitions;

(v) Acquiring visas, including any associated fees;

(vi) Acquiring photographs and identity or immigration documents,

such as passports, including any associated fees;

(vii) Accessing the job opportunity, including required medical examinations and immunizations; background, reference, and security clearance checks and examinations; and additional certifications;

(viii) An employer's recruiters, agents or attorneys, or other

notary or legal fees;

(ix) Language interpretation or translation, arranging for or accompanying on travel, or providing other advice to employees or potential employees;

(x) Government-mandated fees, such as border crossing fees, levies, or worker welfare funds;

(xi) Transportation and subsistence costs--

(A) While in transit, including, but not limited to, airfare or costs of other modes of transportation, terminal fees, and travel taxes associated with travel from the country of origin to the country of performance and the return journey upon the end of employment; and

(B) From the airport or disembarkation point to the worksite;

(xii) Security deposits, bonds, and insurance; and

(xiii) Equipment charges.

(2) A recruitment fee, as described in the introductory text of this definition, is a recruitment fee, regardless of whether the payment is--

(i) Paid in property or money;

(ii) Deducted from wages;

(iii) Paid back in wage or benefit concessions;

(iv) Paid back as a kickback, bribe, in-kind payment, free labor, tip, or tribute; or

(v) Collected by an employer or a third party, whether licensed or unlicensed, including, but not limited to--

(A) Agents;

(B) Labor brokers;

(C) Recruiters;

(D) Staffing firms (including private employment and placement firms);

(E) Subsidiaries/affiliates of the employer;

(F) Any agent or employee of such entities; and

(G) Subcontractors at all tiers.

“Severe forms of trafficking in persons” means-

(1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

(2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

“Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

“Subcontract” means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

“Subcontractor” means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) *Policy.* The United States Government has adopted a policy prohibiting trafficking in persons including the trafficking-related activities of this clause. Contractors, contractor employees, and their agents shall not-

- (1) Engage in severe forms of trafficking in persons during the period of performance of the contract;
- (2) Procure commercial sex acts during the period of performance of the contract;
- (3) Use forced labor in the performance of the contract;
- (4) Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee's identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;
- (5)
 - (i) Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language understood by the employee or potential employee, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant costs to be charged to the employee or potential employee, and, if applicable, the hazardous nature of the work;
 - (ii) Use recruiters that do not comply with local labor laws of the country in which the recruiting takes place;
- (6) Charge employees or potential employees recruitment fees;
- (7)
 - (i) Fail to provide return transportation or pay for the cost of return transportation upon the end of employment--
 - (A) For an employee who is not a national of the country in which the work is taking place and who was brought into that country for the purpose of working on a U.S. Government contract or subcontract (for portions of contracts performed outside the United States); or
 - (B) For an employee who is not a United States national and who was brought into the United States for the purpose of working on a U.S. Government contract or subcontract, if the payment of such costs is required under existing temporary worker programs or pursuant to a written agreement with the employee (for portions of contracts performed inside the United States); except that--
 - (ii) The requirements of paragraphs (b)(7)(i) of this clause shall not apply to an employee who is--
 - (A) Legally permitted to remain in the country of employment and who chooses to do so; or
 - (B) Exempted by an authorized official of the contracting agency from the requirement to provide return transportation or pay for the cost of return transportation;
 - (iii) The requirements of paragraph (b)(7)(i) of this clause are modified for a victim of trafficking in persons who is seeking victim services or legal redress in the country of

employment, or for a witness in an enforcement action related to trafficking in persons. The contractor shall provide the return transportation or pay the cost of return transportation in a way that does not obstruct the victim services, legal redress, or witness activity. For example, the contractor shall not only offer return transportation to a witness at a time when the witness is still needed to testify. This paragraph does not apply when the exemptions at paragraph (b)(7)(ii) of this clause apply.

(8) Provide or arrange housing that fails to meet the host country housing and safety standards; or

(9) If required by law or contract, fail to provide an employment contract, recruitment agreement, or other required work document in writing. Such written work document shall be in a language the employee understands. If the employee must relocate to perform the work, the work document shall be provided to the employee at least five days prior to the employee relocating. The employee's work document shall include, but is not limited to, details about work description, wages, prohibition on charging recruitment fees, work location(s), living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance process, and the content of applicable laws and regulations that prohibit trafficking in persons.

(c) *Contractor requirements.* The Contractor shall-

(1) Notify its employees and agents of-

(i) The United States Government's policy prohibiting trafficking in persons, described in paragraph (b) of this clause; and

(ii) The actions that will be taken against employees or agents for violations of this policy. Such actions for employees may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

(2) Take appropriate action, up to and including termination, against employees, agents, or subcontractors that violate the policy in paragraph (b) of this clause.

(d) *Notification.*

(1) The Contractor shall inform the Contracting Officer and the agency Inspector General immediately of-

(i) Any credible information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, subcontractor employee, or their agent has engaged in conduct that violates the policy in paragraph (b) of this clause (see also 18 U.S.C. 1351, Fraud in Foreign Labor Contracting, and 52.203-13(b)(3)(i)(A), if that clause is included in the solicitation or contract, which requires disclosure to the agency Office of the Inspector General when the Contractor has credible evidence of fraud); and

(ii) Any actions taken against a Contractor employee, subcontractor, subcontractor employee, or their agent pursuant to this clause.

(2) If the allegation may be associated with more than one contract, the Contractor shall inform the contracting officer for the contract with the highest dollar value.

(e) *Remedies.* In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), (g), (h), or (i) of this clause may result in-

(1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;

(2) Requiring the Contractor to terminate a subcontract;

- (3) Suspension of contract payments until the Contractor has taken appropriate remedial action;
- (4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;
- (5) Declining to exercise available options under the contract;
- (6) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or
- (7) Suspension or debarment.

(f) *Mitigating and aggravating factors.* When determining remedies, the Contracting Officer may consider the following:

(1) *Mitigating factors.* The Contractor had a Trafficking in Persons compliance plan or an awareness program at the time of the violation, was in compliance with the plan, and has taken appropriate remedial actions for the violation, that may include reparation to victims for such violations.

(2) *Aggravating factors.* The Contractor failed to abate an alleged violation or enforce the requirements of a compliance plan, when directed by the Contracting Officer to do so.

(g) *Full cooperation.*

(1) The Contractor shall, at a minimum-

(i) Disclose to the agency Inspector General information sufficient to identify the nature and extent of an offense and the individuals responsible for the conduct;

(ii) Provide timely and complete responses to Government auditors' and investigators' requests for documents;

(iii) Cooperate fully in providing reasonable access to its facilities and staff (both inside and outside the U.S.) to allow contracting agencies and other responsible Federal agencies to conduct audits, investigations, or other actions to ascertain compliance with the Trafficking Victims Protection Act of 2000 (22 U.S.C. chapter 78), E.O. 13627, or any other applicable law or regulation establishing restrictions on trafficking in persons, the procurement of commercial sex acts, or the use of forced labor; and

(iv) Protect all employees suspected of being victims of or witnesses to prohibited activities, prior to returning to the country from which the employee was recruited, and shall not prevent or hinder the ability of these employees from cooperating fully with Government authorities.

(2) The requirement for full cooperation does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not-

(i) Require the Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine;

(ii) Require any officer, director, owner, employee, or agent of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; or

(iii) Restrict the Contractor from-

(A) Conducting an internal investigation; or

(B) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

(h) *Compliance plan.*

(1) This paragraph (h) applies to any portion of the contract that-

- (i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and
- (ii) Has an estimated value that exceeds \$500,000.

(2) The Contractor shall maintain a compliance plan during the performance of the contract that is appropriate-

- (i) To the size and complexity of the contract; and
- (ii) To the nature and scope of the activities to be performed for the Government, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.

(3) *Minimum requirements.* The compliance plan must include, at a minimum, the following:

- (i) An awareness program to inform contractor employees about the Government's policy prohibiting trafficking-related activities described in paragraph (b) of this clause, the activities prohibited, and the actions that will be taken against the employee for violations. Additional information about Trafficking in Persons and examples of awareness programs can be found at the Web site for the Department of State's Office to Monitor and Combat Trafficking in Persons at <http://www.state.gov/j/tip/>.
- (ii) A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at help@befree.org.
- (iii) A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employee or potential employees, and ensures that wages meet applicable host-country legal requirements or explains any variance.
- (iv) A housing plan, if the Contractor or subcontractor intends to provide or arrange housing, that ensures that the housing meets host-country housing and safety standards.
- (v) Procedures to prevent agents and subcontractors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or subcontractor employees that have engaged in such activities.

(4) *Posting.*

- (i) The Contractor shall post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the work is to be performed in the field or not in a fixed location) and on the Contractor's Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Contractor shall provide the relevant contents of the compliance plan to each worker in writing.
- (ii) The Contractor shall provide the compliance plan to the Contracting Officer upon request.

(5) *Certification.* Annually after receiving an award, the Contractor shall submit a certification to the Contracting Officer that-

(i) It has implemented a compliance plan to prevent any prohibited activities identified at paragraph (b) of this clause and to monitor, detect, and terminate any agent, subcontract or subcontractor employee engaging in prohibited activities; and

(ii) After having conducted due diligence, either-

(A) To the best of the Contractor's knowledge and belief, neither it nor any of its agents, subcontractors, or their agents is engaged in any such activities; or

(B) If abuses relating to any of the prohibited activities identified in paragraph (b) of this clause have been found, the Contractor or subcontractor has taken the appropriate remedial and referral actions.

(i) *Subcontracts.*

(1) The Contractor shall include the substance of this clause, including this paragraph (i), in all subcontracts and in all contracts with agents. The requirements in paragraph (h) of this clause apply only to any portion of the subcontract that-

(A) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(B) Has an estimated value that exceeds \$500,000.

(2) If any subcontractor is required by this clause to submit a certification, the Contractor shall require submission prior to the award of the subcontract and annually thereafter. The certification shall cover the items in paragraph (h)(5) of this clause.

I.70 52.222-54 - Employment Eligibility Verification (Oct 2015)

(a) *Definitions.* As used in this clause-

“Commercially available off-the-shelf (COTS) item”-

(1) Means any item of supply that is-

(i) A commercial item (as defined in paragraph (1) of the definition at 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products. Per 46 CFR 525.1(c)(2), “bulk cargo” means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

“Employee assigned to the contract” means an employee who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee-

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

“Subcontract” means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

“Subcontractor” means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

“United States,” as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

(b) *Enrollment and verification requirements.*

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall-

(i) *Enroll.* Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) *Verify all new employees.* Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) *Verify employees assigned to the contract.* For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee’s assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of-

(i) *All new employees.*

(A) *Enrolled 90 calendar days or more.* The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) *Enrolled less than 90 calendar days.* Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) *Employees assigned to the contract.* For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2), respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) *Option to verify employment eligibility of all employees.* The Contractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the

contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of-

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor shall comply, for the period of performance of this contract, with the requirement of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.

(ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.

(c) *Web site.* Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: <http://www.dhs.gov/E-Verify> .

(d) *Individuals previously verified.* The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee-

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD) -12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) *Subcontracts.* The contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that-

(1) *Is for-*

(i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than \$3,500; and

(3) Includes work performed in the United States.

I.71 52.222-55 -- Minimum Wages Under Executive Order 13658 (Dec 2015)

(a) *Definitions.* As used in this clause--

"United States" means the 50 states and the District of Columbia.

"Worker"-

(1) Means any person engaged in performing work on, or in connection with, a contract covered by Executive Order 13658, and-

(i) Whose wages under such contract are governed by the Fair Labor Standards Act (29 U.S.C. chapter 8), the Service Contract Labor Standards statute (41 U.S.C. chapter 67), or the Wage Rate Requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV);

(ii) Other than individuals employed in a bona fide executive, administrative, or professional capacity, as those terms are defined in 29 CFR part 541; and

(iii) Regardless of the contractual relationship alleged to exist between the individual and the employer.

(2) Includes workers performing on, or in connection with, the contract whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(c).

(3) Also includes any person working on, or in connection with, the contract and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.

(b) *Executive Order Minimum Wage rate.*

(1) The Contractor shall pay to workers, while performing in the United States, and performing on, or in connection with, this contract, a minimum hourly wage rate of \$10.10 per hour beginning January 1, 2015.

(2) The Contractor shall adjust the minimum wage paid, if necessary, beginning January 1, 2016, and annually thereafter, to meet the applicable annual E.O. minimum wage. The Administrator of the Department of Labor's Wage and Hour Division (the Administrator) will publish annual determinations in the Federal Register no later than 90 days before the effective date of the new E.O. minimum wage rate. The Administrator will also publish the applicable E.O. minimum wage on www.wdol.gov (or any successor Web site) and a general notice on all wage determinations issued under the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, that will provide information on the E.O. minimum wage and how to obtain annual updates. The applicable published E.O. minimum wage is incorporated by reference into this contract.

(3)

(i) The Contractor may request a price adjustment only after the effective date of the new annual E.O. minimum wage determination. Prices will be adjusted only for increased labor costs (including subcontractor labor costs) as a result of an increase in the annual E.O. minimum wage, and for associated labor costs (including those for subcontractors). Associated labor costs shall include increases or decreases that result from changes in social security and unemployment taxes and workers' compensation insurance, but will not otherwise include any amount for general and administrative costs, overhead, or profit.

(ii) Subcontractors may be entitled to adjustments due to the new minimum wage, pursuant to paragraph (b)(2). Contractors shall consider any subcontractor requests for such price adjustment.

(iii) The Contracting Officer will not adjust the contract price under this clause for any costs other than those identified in paragraph (b)(3)(i) of this clause, and will not provide

duplicate price adjustments with any price adjustment under clauses implementing the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute.

(4) The Contractor warrants that the prices in this contract do not include allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(5) A pay period under this clause may not be longer than semi-monthly, but may be shorter to comply with any applicable law or other requirement under this contract establishing a shorter pay period. Workers shall be paid no later than one pay period following the end of the regular pay period in which such wages were earned or accrued.

(6) The Contractor shall pay, unconditionally to each worker, all wages due free and clear without subsequent rebate or kickback. The Contractor may make deductions that reduce a worker's wages below the E.O. minimum wage rate only if done in accordance with 29 CFR 10.23, Deductions.

(7) The Contractor shall not discharge any part of its minimum wage obligation under this clause by furnishing fringe benefits or, with respect to workers whose wages are governed by the Service Contract Labor Standards statute, the cash equivalent thereof.

(8) Nothing in this clause shall excuse the Contractor from compliance with any applicable Federal or State prevailing wage law or any applicable law or municipal ordinance establishing a minimum wage higher than the E.O. minimum wage. However, wage increases under such other laws or municipal ordinances are not subject to price adjustment under this subpart.

(9) The Contractor shall pay the E.O. minimum wage rate whenever it is higher than any applicable collective bargaining agreement(s) wage rate.

(10) The Contractor shall follow the policies and procedures in 29 CFR 10.24(b) and 10.28 for treatment of workers engaged in an occupation in which they customarily and regularly receive more than \$30 a month in tips.

(c)

(1) This clause applies to workers as defined in paragraph (a). As provided in that definition--

(i) Workers are covered regardless of the contractual relationship alleged to exist between the contractor or subcontractor and the worker;

(ii) Workers with disabilities whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(c) are covered; and

(iii) Workers who are registered in a bona fide apprenticeship program or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship, are covered.

(2) This clause does not apply to--

(i) Fair Labor Standards Act (FLSA)-covered individuals performing in connection with contracts covered by the E.O., i.e. those individuals who perform duties necessary to the performance of the contract, but who are not directly engaged in performing the specific work called for by the contract, and who spend less than 20 percent of their hours worked in a particular workweek performing in connection with such contracts;

(ii) Individuals exempted from the minimum wage requirements of the FLSA under 29 U.S.C. 213(a) and 214(a) and (b), unless otherwise covered by the Service Contract Labor Standards statute, or the Wage Rate Requirements (Construction) statute. These individuals include but are not limited to--

(A) Learners, apprentices, or messengers whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(a).

(B) Students whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(b).

(C) Those employed in a bona fide executive, administrative, or professional capacity (29 U.S.C. 213(a)(1) and 29 CFR part 541).

(d) *Notice.* The Contractor shall notify all workers performing work on, or in connection with, this contract of the applicable E.O. minimum wage rate under this clause. With respect to workers covered by the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, the Contractor may meet this requirement by posting, in a prominent and accessible place at the worksite, the applicable wage determination under those statutes. With respect to workers whose wages are governed by the FLSA, the Contractor shall post notice, utilizing the poster provided by the Administrator, which can be obtained at www.dol.gov/whd/govcontracts, in a prominent and accessible place at the worksite. Contractors that customarily post notices to workers electronically may post the notice electronically provided the electronic posting is displayed prominently on any Web site that is maintained by the contractor, whether external or internal, and customarily used for notices to workers about terms and conditions of employment.

(e) *Payroll Records.*

(1) The Contractor shall make and maintain records, for three years after completion of the work, containing the following information for each worker:

- (i) Name, address, and social security number;
- (ii) The worker's occupation(s) or classification(s);
- (iii) The rate or rates of wages paid;
- (iv) The number of daily and weekly hours worked by each worker;
- (v) Any deductions made; and
- (vi) Total wages paid.

(2) The Contractor shall make records pursuant to paragraph (e)(1) of this clause available for inspection and transcription by authorized representatives of the Administrator. The Contractor shall also make such records available upon request of the Contracting Officer.

(3) The Contractor shall make a copy of the contract available, as applicable, for inspection or transcription by authorized representatives of the Administrator.

(4) Failure to comply with this paragraph (e) shall be a violation of 29 CFR 10.26 and this contract. Upon direction of the Administrator or upon the Contracting Officer's own action, payment shall be withheld until such time as the noncompliance is corrected.

(5) Nothing in this clause limits or otherwise modifies the Contractor's payroll and recordkeeping obligations, if any, under the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, or any other applicable law.

(f) *Access.* The Contractor shall permit authorized representatives of the Administrator to conduct investigations, including interviewing workers at the worksite during normal working hours.

(g) *Withholding.* The Contracting Officer, upon his or her own action or upon written request of the Administrator, will withhold funds or cause funds to be withheld, from the Contractor under this or any other Federal contract with the same Contractor, sufficient to pay workers the full amount of wages required by this clause.

(h) *Disputes*. Department of Labor has set forth in 29 CFR 10.51, Disputes concerning contractor compliance, the procedures for resolving disputes concerning a contractor's compliance with Department of Labor regulations at 29 CFR part 10. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. These disputes include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the Department of Labor, or the workers or their representatives.

(i) *Antiretaliation*. The Contractor shall not discharge or in any other manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under or related to compliance with the E.O. or this clause, or has testified or is about to testify in any such proceeding.

(j) *Subcontractor compliance*. The Contractor is responsible for subcontractor compliance with the requirements of this clause and may be held liable for unpaid wages due subcontractor workers.

(k) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (k) in all subcontracts, regardless of dollar value, that are subject to the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

I.72 52.222-62 Paid Sick Leave Under Executive Order 13706 (JAN 2017)

(a) Definitions. As used in this clause (in accordance with 29 CFR 13.2)--

“Child, domestic partner, and domestic violence” have the meaning given in 29 CFR 13.2.

“Employee”-

(1)

(i) Means any person engaged in performing work on or in connection with a contract covered by Executive Order (E.O.) 13706; and

(A) Whose wages under such contract are governed by the Service Contract Labor Standards statute (41 U.S.C. chapter 67), the Wage Rate Requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV), or the Fair Labor Standards Act (29 U.S.C. chapter 8);

(B) Including employees who qualify for an exemption from the Fair Labor Standards Act's minimum wage and overtime provisions;

(C) Regardless of the contractual relationship alleged to exist between the individual and the employer; and

(ii) Includes any person performing work on or in connection with the contract and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.

(2)

(i) An employee performs “on” a contract if the employee directly performs the specific services called for by the contract; and

(ii) An employee performs “in connection with” a contract if the employee's work activities are necessary to the performance of a contract but are not the specific services called for by the contract.

“Individual related by blood or affinity whose close association with the employee” is the equivalent of a family relationship has the meaning given in 29 CFR 13.2.

“Multiemployer plan” means a plan to which more than one employer is required to contribute and which is maintained pursuant to one or more collective bargaining agreements between one or more employee organizations and more than one employer.

“Paid sick leave” means compensated absence from employment that is required by E.O. 13706 and 29 CFR part 13.

“Parent, sexual assault, spouse, and stalking” have the meaning given in 29 CFR 13.2.

“United States” means the 50 States and the District of Columbia.

(b) Executive Order 13706.

(1) This contract is subject to E.O. 13706 and the regulations issued by the Secretary of Labor in 29 CFR part 13 pursuant to the E.O.

(2) If this contract is not performed wholly within the United States, this clause only applies with respect to that part of the contract that is performed within the United States.

(c) Paid sick leave. The Contractor shall--

(1) Permit each employee engaged in performing work on or in connection with this contract to earn not less than 1 hour of paid sick leave for every 30 hours worked;

(2) Allow accrual and use of paid sick leave as required by E.O. 13706 and 29 CFR part 13;

(3) Comply with the accrual, use, and other requirements set forth in 29 CFR 13.5 and 13.6, which are incorporated by reference in this contract;

(4) Provide paid sick leave to all employees when due free and clear and without subsequent deduction (except as otherwise provided by 29 CFR 13.24), rebate, or kickback on any account;

(5) Provide pay and benefits for paid sick leave used no later than one pay period following the end of the regular pay period in which the paid sick leave was taken; and

(6) Be responsible for the compliance by any subcontractor with the requirements of E.O. 13706, 29 CFR part 13, and this clause.

(d) Contractors may fulfill their obligations under E.O. 13706 and 29 CFR part 13 jointly with other contractors through a multiemployer plan, or may fulfill their obligations through an individual fund, plan, or program (see 29 CFR 13.8).

(e) Withholding. The Contracting Officer will, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this or any other Federal contract with the same Contractor, so much of the accrued payments or advances as may be considered necessary to pay employees the full amount owed to compensate for any violation of the requirements of E.O. 13706, 29 CFR part 13, or this clause, including--

(1) Any pay and/or benefits denied or lost by reason of the violation;

(2) Other actual monetary losses sustained as a direct result of the violation; and

(3) Liquidated damages.

(f) Payment suspension/contract termination/contractor debarment.

(1) In the event of a failure to comply with E.O. 13706, 29 CFR part 13, or this clause, the contracting agency may, on its own action or after authorization or by direction of the Department

of Labor and written notification to the Contractor take action to cause suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(2) Any failure to comply with the requirements of this clause may be grounds for termination for default or cause.

(3) A breach of the contract clause may be grounds for debarment as a contractor and subcontractor as provided in 29 CFR 13.52.

(g) The paid sick leave required by E.O. 13706, 29 CFR part 13, and this clause is in addition to the Contractor's obligations under the Service Contract Labor Standards statute and Wage Rate Requirements (Construction) statute, and the Contractor may not receive credit toward its prevailing wage or fringe benefit obligations under those Acts for any paid sick leave provided in satisfaction of the requirements of E.O. 13706 and 29 CFR part 13.

(h) Nothing in E.O. 13706 or 29 CFR part 13 shall excuse noncompliance with or supersede any applicable Federal or State law, any applicable law or municipal ordinance, or a collective bargaining agreement requiring greater paid sick leave or leave rights than those established under E.O. 13706 and 29 CFR part 13.

(i) Recordkeeping.

(1) The Contractor shall make and maintain, for no less than three (3) years from the completion of the work on the contract, records containing the following information for each employee, which the Contractor shall make available upon request for inspection, copying, and transcription by authorized representatives of the Administrator of the Wage and Hour Division of the Department of Labor:

(i) Name, address, and social security number of each employee.

(ii) The employee's occupation(s) or classification(s).

(iii) The rate or rates of wages paid (including all pay and benefits provided).

(iv) The number of daily and weekly hours worked.

(v) Any deductions made.

(vi) The total wages paid (including all pay and benefits provided) each pay period.

(vii) A copy of notifications to employees of the amount of paid sick leave the employee has accrued, as required under 29 CFR 13.5(a)(2).

(viii) A copy of employees' requests to use paid sick leave, if in writing, or, if not in writing, any other records reflecting such employee requests.

(ix) Dates and amounts of paid sick leave taken by employees (unless the Contractor's paid time off policy satisfies the requirements of E.O. 13706 and 29 CFR part 13 as described in 29 CFR 13.5(f)(5), leave shall be designated in records as paid sick leave pursuant to E.O. 13706).

(x) A copy of any written responses to employees' requests to use paid sick leave, including explanations for any denials of such requests, as required under 29 CFR 13.5(d)(3).

(xi) Any records reflecting the certification and documentation the Contractor may require an employee to provide under 29 CFR 13.5(e), including copies of any certification or documentation provided by an employee.

(xii) Any other records showing any tracking of or calculations related to an employee's accrual or use of paid sick leave.

(xiii) The relevant contract.

(xiv) The regular pay and benefits provided to an employee for each use of paid sick leave.

(xv) Any financial payment made for unused paid sick leave upon a separation from employment intended, pursuant to 29 CFR 13.5(b)(5), to relieve the Contractor from the obligation to reinstate such paid sick leave as otherwise required by 29 CFR 13.5(b)(4).

(2)

(i) If the Contractor wishes to distinguish between an employee's covered and noncovered work, the Contractor shall keep records or other proof reflecting such distinctions. Only if the Contractor adequately segregates the employee's time will time spent on noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. Similarly, only if the Contractor adequately segregates the employee's time may the Contractor properly refuse an employee's request to use paid sick leave on the ground that the employee was scheduled to perform noncovered work during the time he or she asked to use paid sick leave.

(ii) If the Contractor estimates covered hours worked by an employee who performs work in connection with contracts covered by the E.O. pursuant to 29 CFR 13.5(a)(1)(i) or (iii), the Contractor shall keep records or other proof of the verifiable information on which such estimates are reasonably based. Only if the Contractor relies on an estimate that is reasonable and based on verifiable information will an employee's time spent in connection with noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. If the Contractor estimates the amount of time an employee spends performing in connection with contracts covered by the E.O., the Contractor shall permit the employee to use his or her paid sick leave during any work time for the Contractor.

(3) In the event the Contractor is not obligated by the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, or the Fair Labor Standards Act to keep records of an employee's hours worked, such as because the employee is exempt from the Fair Labor Standards Act's minimum wage and overtime requirements, and the Contractor chooses to use the assumption permitted by 29 CFR 13.5(a)(1)(iii), the Contractor is excused from the requirement in paragraph (i)(1)(iv) of this clause and 29 CFR 13.25(a)(4) to keep records of the employee's number of daily and weekly hours worked.

(4)

(i) Records relating to medical histories or domestic violence, sexual assault, or stalking, created for purposes of E.O. 13706, whether of an employee or an employee's child, parent, spouse, domestic partner, or other individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship, shall be maintained as confidential records in separate files/records from the usual personnel files.

(ii) If the confidentiality requirements of the Genetic Information Nondiscrimination Act of 2008 (GINA), section 503 of the Rehabilitation Act of 1973, and/or the Americans with Disabilities Act (ADA) apply to records or documents created to comply with the recordkeeping requirements in this contract clause, the records and documents shall also be maintained in compliance with the confidentiality requirements of the GINA, section 503 of the Rehabilitation Act of 1973, and/or ADA as described in 29 CFR 1635.9, 41 CFR 60-741.23(d), and 29 CFR 1630.14(c)(1), respectively.

(iii) The Contractor shall not disclose any documentation used to verify the need to use 3 or more consecutive days of paid sick leave for the purposes listed in 29 CFR 13.5(c)(1)(iv)

(as described in 29 CFR 13.5(e)(1)(ii)) and shall maintain confidentiality about any domestic abuse, sexual assault, or stalking, unless the employee consents or when disclosure is required by law.

(5) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(6) Nothing in this contract clause limits or otherwise modifies the Contractor's recordkeeping obligations, if any, under the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, the Family and Medical Leave Act, E.O. 13658, their respective implementing regulations, or any other applicable law.

(j) Interference/discrimination.

(1) The Contractor shall not in any manner interfere with an employee's accrual or use of paid sick leave as required by E.O. 13706 or 29 CFR part 13. Interference includes, but is not limited to--

- (i) Miscalculating the amount of paid sick leave an employee has accrued;
- (ii) Denying or unreasonably delaying a response to a proper request to use paid sick leave;
- (iii) Discouraging an employee from using paid sick leave;
- (iv) Reducing an employee's accrued paid sick leave by more than the amount of such leave used;
- (v) Transferring an employee to work on contracts not covered by the E.O. to prevent the accrual or use of paid sick leave;
- (vi) Disclosing confidential information contained in certification or other documentation provided to verify the need to use paid sick leave; or
- (vii) Making the use of paid sick leave contingent on the employee's finding a replacement worker or the fulfillment of the Contractor's operational needs.

(2) The Contractor shall not discharge or in any other manner discriminate against any employee for--

- (i) Using, or attempting to use, paid sick leave as provided for under E.O. 13706 and 29 CFR part 13;
- (ii) Filing any complaint, initiating any proceeding, or otherwise asserting any right or claim under E.O. 13706 and 29 CFR part 13;
- (iii) Cooperating in any investigation or testifying in any proceeding under E.O. 13706 and 29 CFR part 13; or
- (iv) Informing any other person about his or her rights under E.O. 13706 and 29 CFR part 13.

(k) Notice. The Contractor shall notify all employees performing work on or in connection with a contract covered by the E.O. of the paid sick leave requirements of E.O. 13706, 29 CFR part 13, and this clause by posting a notice provided by the Department of Labor in a prominent and accessible place at the worksite so it may be readily seen by employees. Contractors that customarily post notices to employees electronically may post the notice electronically, provided such electronic posting is displayed prominently on any Web site that is maintained by the Contractor, whether external or internal, and customarily used for notices to employees about terms and conditions of employment.

(l) Disputes concerning labor standards. Disputes related to the application of E.O. 13706 to this contract shall not be subject to the general disputes clause of the contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR part 13. Disputes within

the meaning of this contract clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the Department of Labor, or the employees or their representatives.

(m) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (m), in all subcontracts, regardless of dollar value, that are subject to the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

I.73 52.223-2 -- Affirmative Procurement of Biobased Products Under Service And Construction Contracts (Sep 2013)

(a) In the performance of this contract, the contractor shall make maximum use of biobased products that are United States Department of Agriculture (USDA)-designated items unless-

(1) The product cannot be acquired-

- (i) Competitively within a time frame providing for compliance with the contract performance schedule;
- (ii) Meeting contract performance requirements; or
- (iii) At a reasonable price.

(2) The product is to be used in an application covered by a USDA categorical exemption (see 7 CFR 3201.3(e)). For example, all USDA-designated items are exempt from the preferred procurement requirement for the following:

- (i) Spacecraft system and launch support equipment.
- (ii) Military equipment, i.e., a product or system designed or procured for combat or combat-related missions.

(b) Information about this requirement and these products is available at <http://www.biopreferred.gov> .

(c) In the performance of this contract, the Contractor shall-

(1) Report to <http://www.sam.gov> , with a copy to the Contracting Officer, on the product types and dollar value of any USDA-designated biobased products purchased by the Contractor during the previous Government fiscal year, between October 1 and September 30; and

(2) Submit this report not later than-

- (i) October 31 of each year during contract performance; and
- (ii) At the end of contract performance.

(End of clause)

I.74 52.223-3 -- Hazardous Material Identification and Material Safety Data (Jan 1997)

(a) "*Hazardous material*," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material	Identification No.
Material identified in ACO Hazardous Material System/SDS Management Database	

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

- (1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to --
 - (i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
 - (ii) Obtain medical treatment for those affected by the material; and
 - (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.
- (2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.
- (3) The Government is not precluded from using similar or identical data acquired from other sources.

I.75 52.223-5 -- Pollution Prevention and Right-to-Know Information (May 2011)

(a) *Definitions. As used in this clause-*

“Toxic chemical” means a chemical or chemical category in listed in 40 CFR 372.65.

(b) Federal facilities are required to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050), and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

- (1) The emergency planning reporting requirements of Section 302 of EPCRA.
- (2) The emergency notice requirements of Section 304 of EPCRA
- (3) The list of Material Safety Data Sheets required by Section 311 of EPCRA
- (4) The emergency and hazardous chemical inventory forms of Section 312 of EPCRA
- (5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA
- (6) The toxic chemical and hazardous substance release and use reduction goals of section 2(e) of Executive Order 13423 and of Executive Order 13514.

I.76 52.223-6 -- Drug-Free Workplace (May 2001)

(a) *Definitions.* As used in this clause --

“Controlled substance” means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 -- 1308.15.

“Conviction” means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

“Criminal drug statute” means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

“Drug-free workplace” means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

“Employee” means an employee of a Contractor directly engaged in the performance of work under a Government contract. “Directly engaged” is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

“Individual” means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall -- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration --

- (1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition;
- (2) Establish an ongoing drug-free awareness program to inform such employees about --
 - (i) The dangers of drug abuse in the workplace;
 - (ii) The Contractor’s policy of maintaining a drug-free workplace;
 - (iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will --

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract or default, and suspension or debarment.

I.77 FAR 52.223-7, Notice of Radioactive Materials (Jan 1997)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, 60* days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either:

- (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this contract, or
- (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries.

Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials,

and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

* The Contracting Officer shall insert the number of days required in advance of delivery of the item or completion of the servicing to assure that required licenses are obtained and appropriate personnel are notified to institute any necessary safety and health precautions. See FAR 23.601(d).

- (b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall –
 - (1) be submitted in writing;
 - (2) state that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and
 - (3) cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.
- (c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.
- (d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

I.78 FAR 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (May 2008)

- (a) *Definitions.* As used in this clause –

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

“Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

- (b) The Contractor, on completion of this contract, shall –
 - (1) Estimate the percentage of the total recovered material content for EPA designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and
 - (2) Submit this estimate to the Contracting Officer.

I.79 52.223-10 -- Waste Reduction Program (May 2011)

- (a) *Definitions.* As used in this clause-

“Recycling” means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

“Waste prevention” means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

“Waste reduction” means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of section 3(e) of Executive Order 13423, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract.

I.80 52.223-13 - Acquisition of EPEAT® - Registered Imaging Equipment (Jun 2014)

(a) *Definitions.* As used in this clause--

“Imaging equipment” means the following products:

(1) Copier--A commercially available imaging product with a sole function of the production of hard copy duplicates from graphic hard-copy originals. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as copiers or upgradeable digital copiers (UDCs).

(2) Digital duplicator--A commercially available imaging product that is sold in the market as a fully automated duplicator system through the method of stencil duplicating with digital reproduction functionality. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as digital duplicators.

(3) Facsimile machine (fax machine)--A commercially available imaging product whose primary functions are scanning hard-copy originals for electronic transmission to remote units and receiving similar electronic transmissions to produce hard-copy output. Electronic transmission is primarily over a public telephone system but also may be via computer network or the Internet. The product also may be capable of producing hard copy duplicates. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as fax machines.

(4) Mailing machine--A commercially available imaging product that serves to print postage onto mail pieces. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as mailing machines.

(5) Multifunction device (MFD)--A commercially available imaging product, which is a physically integrated device or a combination of functionally integrated components, that performs two or more of the core functions of copying, printing, scanning, or faxing. The copy functionality as addressed in this definition is considered to be distinct from single-sheet convenience copying offered by fax machines. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as MFDs or multifunction products.

(6) Printer--A commercially available imaging product that serves as a hard-copy output device and is capable of receiving information from single-user or networked computers, or other input devices (e.g., digital cameras). The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as printers, including printers that can be upgraded into MFDs in the field.

(7) Scanner--A commercially available imaging product that functions as an electro-optical device for converting information into electronic images that can be stored, edited, converted, or

transmitted, primarily in a personal computing environment. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as scanners.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only imaging equipment that, at the time of submission of proposals and at the time of award, was EPEAT® bronze-registered or higher.

(c) For information about EPEAT®, see www.epa.gov/epeat.

I.81 52.223-14 - Acquisition of EPEAT® -Registered Televisions (Jun 2014)

(a) *Definitions.* As used in this clause-

“Television or TV” means a commercially available electronic product designed primarily for the reception and display of audiovisual signals received from terrestrial, cable, satellite, Internet Protocol TV (IPTV), or other digital or analog sources. A TV consists of a tuner/receiver and a display encased in a single enclosure. The product usually relies upon a cathode-ray tube (CRT), liquid crystal display (LCD), plasma display, or other display technology. Televisions with computer capability (e.g., computer input port) may be considered to be a TV as long as they are marketed and sold to consumers primarily as televisions.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only televisions that, at the time of submission of proposals and at the time of award, were EPEAT® bronze-registered or higher.

(c) For information about EPEAT®, see www.epa.gov/epeat.

I.82 52.223-15 - Energy Efficiency in Energy-Consuming Products (Dec 2007)

(a) *Definition.* As used in this clause--

“Energy-efficient product”-

(1) Means a product that-

(i) Meets Department of Energy and Environmental Protection Agency criteria for use of the Energy Star trademark label; or

(ii) Is in the upper 25 percent of efficiency for all similar products as designated by the Department of Energy’s Federal Energy Management Program.

(2) The term “product” does not include any energy-consuming product or system designed or procured for combat or combat-related missions (42 U.S.C. 8259b).

(b) The Contractor shall ensure that energy-consuming products are energy efficient products (*i.e.*, ENERGY STAR® products or FEMP-designated products) at the time of contract award, for products that are-

(1) Delivered;

(2) Acquired by the Contractor for use in performing services at a Federally-controlled facility;

(3) Furnished by the Contractor for use by the Government; or

(4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.

(c) The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless-

(1) The energy-consuming product is not listed in the ENERGY STAR® Program or FEMP; or

(2) Otherwise approved in writing by the Contracting Officer.

(d) Information about these products is available for-

(1) ENERGY STAR® at <http://www.energystar.gov/products>; and

(2) FEMP at http://www1.eere.energy.gov/femp/procurement/eep_requirements.html.

I.83 52.223-16 - Acquisition of EPEAT®-Registered Personal Computer Products (Oct 2015)

(a) *Definitions.* As used in this clause-

“Computer” means a device that performs logical operations and processes data. Computers are composed of, at a minimum:

(1) A central processing unit (CPU) to perform operations;

(2) User input devices such as a keyboard, mouse, digitizer, or game controller; and

(3) A computer display screen to output information. Computers include both stationary and portable units, including desktop computers, integrated desktop computers, notebook computers, thin clients, and workstations. Although computers must be capable of using input devices and computer displays, as noted in (2) and (3) above, computer systems do not need to include these devices on shipment to meet this definition. This definition does not include server computers, gaming consoles, mobile telephones, portable hand-held calculators, portable digital assistants (PDAs), MP3 players, or any other mobile computing device with displays less than 4 inches, measured diagonally.

“Computer display” means a display screen and its associated electronics encased in a single housing or within the computer housing (e.g., notebook or integrated desktop computer) that is capable of displaying output information from a computer via one or more inputs such as a VGA, DVI, USB, DisplayPort, and/or IEEE 1394-2008TM, Standard for High Performance Serial Bus. Examples of computer display technologies are the cathode-ray tube (CRT) and liquid crystal display (LCD).

“Desktop computer” means a computer where the main unit is intended to be located in a permanent location, often on a desk or on the floor. Desktops are not designed for portability and utilize an external computer display, keyboard, and mouse. Desktops are designed for a broad range of home and office applications.

“Integrated desktop computer” means a desktop system in which the computer and computer display function as a single unit that receives its AC power through a single cable. Integrated desktop computers come in one of two possible forms:

(1) A system where the computer display and computer are physically combined into a single unit; or

(2) A system packaged as a single system where the computer display is separate but is connected to the main chassis by a DC power cord and both the computer and computer display are powered from a single power supply. As a subset of desktop computers, integrated desktop computers are typically designed to provide similar functionality as desktop systems.

“Notebook computer” means a computer designed specifically for portability and to be operated for extended periods of time either with or without a direct connection to an AC power source. Notebooks must utilize an integrated computer display and be capable of operation off of an integrated battery or other portable power source. In addition, most notebooks use an external power supply and have an integrated keyboard and pointing device. Notebook computers are typically designed to provide similar functionality to desktops, including operation of software similar in functionality to that used in desktops. Docking stations are considered accessories for notebook computers, not notebook computers. Tablet PCs,

which may use touch-sensitive screens along with, or instead of, other input devices, are considered notebook computers.

“Personal computer product” means a computer, computer display, desktop computer, integrated desktop computer, or notebook computer.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only personal computer products that, at the time of submission of proposals and at the time of award, were EPEAT® bronze-registered or higher.

(c) For information about EPEAT®, see www.epa.gov/epeat.

I.84 52.223-17 - Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts (Aug 2018)

(a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired-

- (1) Competitively within a timeframe providing for compliance with the contract performance schedule;
- (2) Meeting contract performance requirements; or
- (3) At a reasonable price.

(b) Information about this requirement is available at EPA’s Comprehensive Procurement Guidelines web site. The list of EPA-designate items is available at <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program> .

I.85 52.223-18 - Encouraging Contractor Policies to Ban Text Messaging While Driving (Aug 2011)

(a) Definitions. As used in this clause--

“Driving”-

- (1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.
- (2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

“Text messaging” means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving, dated October 1, 2009.

(c) The Contractor is encouraged to-

- (1) Adopt and enforce policies that ban text messaging while driving-
 - (i) Company-owned or -rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as-

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

I.86 52.223-19 -- Compliance with Environmental Management Systems (May 2011)

The Contractor's work under this contract shall conform with all operational controls identified in the applicable agency or facility Environmental Management Systems and provide monitoring and measurement information necessary for the Government to address environmental performance relative to the goals of the Environmental Management Systems.

I.87 52.223-20 - Aerosols (Jun 2016)

(a) *Definitions.* As used in this clause--

“Global warming potential” means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide’s global warming potential is defined as 1.0.

“High global warming potential hydrofluorocarbons” means any hydrofluorocarbons in a particular end use for which EPA’s Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables of alternatives available at <http://www.epa.gov/snap/>.

“Hydrofluorocarbons” means compounds that contain only hydrogen, fluorine, and carbon.

(b) Unless otherwise specified in the contract, the Contractor shall reduce its use, release, or emissions of high global warming potential hydrofluorocarbons, when feasible, from aerosol propellants or solvents under this contract. When determining feasibility of using a particular alternative, the Contractor shall consider environmental, technical, and economic factors such as--

- (1) In-use emission rates, energy efficiency;
- (2) Safety, such as flammability or toxicity;
- (3) Ability to meet technical performance requirements; and
- (4) Commercial availability at a reasonable cost.

(c) The Contractor shall refer to EPA’s SNAP program to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables available at <http://www.epa.gov/snap/>.

I.88 52.223-21 -- Foams (Jun 2016)

(a) *Definitions.* As used in this clause--

“Global warming potential” means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide’s global warming potential is defined as 1.0.

“High global warming potential hydrofluorocarbons” means any hydrofluorocarbons in a particular end use for which EPA’s Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR part 82, subpart G. with supplemental tables of alternatives available at <http://www.epa.gov/snap/>).

“Hydrofluorocarbons” means compounds that contain only hydrogen, fluorine, and carbon.

(b) Unless otherwise specified in the contract, the Contractor shall reduce its use, release, and emissions of high global warming potential hydrofluorocarbons and refrigerant blends containing hydrofluorocarbons, when feasible, from foam blowing agents, under this contract. When determining feasibility of using a particular alternative, the Contractor shall consider environmental, technical, and economic factors such as--

- (1) In-use emission rates, energy efficiency, and safety;
- (2) Ability to meet performance requirements; and;
- (3) Commercial availability at a reasonable cost.

(c) The Contractor shall refer to EPA’s SNAP program to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables available at <http://www.epa.gov/snap/>.

I.89 52.224-1 -- Privacy Act Notification (Apr 1984)

The Contractor will be required to design, develop, or operate a system of records on individuals, to accomplish an agency function subject to the Privacy Act of 1974, Public Law 93-579, December 31, 1974 (5 U.S.C.552a) and applicable agency regulations. Violation of the Act may involve the imposition of criminal penalties.

I.90 52.224-2 -- Privacy Act (Apr 1984)

(a) The Contractor agrees to --

(1) Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies --

- (i) The systems of records; and
- (ii) The design, development, or operation work that the contractor is to perform;

(2) Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and

(3) Include this clause, including this subparagraph (3), in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.

(b) In the event of violations of the Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the Contractor is considered to be an employee of the agency.

(c)

(1) "Operation of a system of records," as used in this clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records.

(2) "Record," as used in this clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

(3) "System of records on individuals," as used in this clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

I.91 52.225-1 -- Buy American-Supplies (May 2014)

(a) *Definitions.* As used in this clause--

"Commercially available off-the-shelf (COTS) item"--

(1) Means any item of supply (including construction material) that is-

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Component" means an article, material, or supply incorporated directly into an end product.

"Cost of components" means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

"Domestic end product" means-

(1) An unmanufactured end product mined or produced in the United States;

(2) An end product manufactured in the United States, if-

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic; or

(ii) The end product is a COTS item.

“End product” means those articles, materials, and supplies to be acquired under the contract for public use.

“Foreign end product” means an end product other than a domestic end product.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) 41 U.S.C. chapter 83, Buy American, provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for an end product that is a COTS item (See [12.505\(a\)\(1\)](#)).

(c) Offerors may obtain from the Contracting Officer a list of foreign articles that the Contracting Officer will treat as domestic for this contract.

(d) The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the solicitation entitled “Buy American Certificate.”

I.92 52.225-9 -- Buy American-Construction Materials (May 2014)

(a) *Definitions.* As used in this clause--

“Commercially available off-the-shelf (COTS) item”-

(1) Means any item of supply (including construction material) that is-

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Domestic construction material” means-

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if-

- (i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or
- (ii) The construction material is a COTS item.

“Foreign construction material” means a construction material other than a domestic construction material.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) *Domestic preference.*

(1) This clause implements the 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows: _Vacuum Pumps, Carbon Fiber and Mass Spectrometer.

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) *Request for determination of inapplicability of the Buy American statute.*

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;
- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) *
<i>Item 1</i>			
Foreign construction material			
Domestic construction material			
<i>Item 2</i>			
Foreign construction material			
Domestic construction material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[*Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]

I.93 52.225-11, Buy American - Construction Materials Under Trade Agreements (Oct 2016)

(a) *Definitions.* As used in this clause –

“Caribbean Basin country construction material” means a construction material that –

- (1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

“Commercially available off-the-shelf (COTS) item” means –

(1) Means any item of supply (including construction material) that is –

- (i) A commercial item (as defined in paragraph (1) of the definition at FAR [2.101](#));
- (ii) Sold in substantial quantities in the commercial marketplace; and
- (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in [46 U.S.C. 40102\(4\)](#), such as agricultural products and petroleum products.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means –

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Designated country” means any of the following countries:

- (1) A World Trade Organization Government Procurement Agreement (WTO GPA) country (Armenia, Aruba, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, Ukraine, or United Kingdom);
- (2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Korea (Republic of), Mexico, Morocco, Nicaragua, Oman, Panama, Peru, or Singapore);
- (3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati,

Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or

- (4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bonaire, British Virgin Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saba, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sint Eustatius, Sint Maarten, or Trinidad and Tobago).

“Designated country construction material” means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

“Domestic construction material” means –

- (1) An unmanufactured construction material mined or produced in the United States;
- (2) A construction material manufactured in the United States, if –
 - (i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or
 - (ii) The construction material is a COTS item.

“Foreign construction material” means a construction material other than a domestic construction material.”

“Free Trade Agreement country construction material” means a construction material that:

- (1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

“Least developed country construction material” means a construction material that:

- (1) Is wholly the growth, product, or manufacture of a least developed country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

“United States” means the 50 States, the District of Columbia, and outlying areas.

“WTO GPA country construction material” means a construction material that:

- (1) Is wholly the growth, product, or manufacture of a WTO GPA country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

- (b) Construction materials.

- (1) This clause implements [41 U.S.C. chapter 83](#), by providing a preference for domestic construction material. In accordance with [41 U.S.C. 1907](#), the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR [12.505\(a\)\(2\)](#)). In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American restrictions are waived for designated country construction materials.
 - (2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.
 - (3) The requirement in paragraph (b)(2) of this clause does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows: None
 - (4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that –
 - (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
 - (ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or
 - (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.
- (c) Request for determination of inapplicability of the Buy American statute.
- (1)
 - (i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including –
 - (A) A description of the foreign and domestic construction materials;
 - (B) Unit of measure;
 - (C) Quantity;
 - (D) Price;
 - (E) Time of delivery or availability;
 - (F) Location of the construction project;
 - (G) Name and address of the proposed supplier; and
 - (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
 - (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
 - (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.
- (d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison			
Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
Item 1			
Foreign construction material	_____	_____	_____
Domestic construction material	_____	_____	_____
Item 2			
Foreign construction material	_____	_____	_____
Domestic construction material	_____	_____	_____

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]

I.94 52.225-13 -- Restrictions on Certain Foreign Purchases (Jun 2008)

- (a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.
- (b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at <http://www.treas.gov/offices/enforcement/ofac/sdn/>. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR chapter V and/or on OFAC's website at <http://www.treas.gov/offices/enforcement/ofac>.
- (c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

I.95 52.227-1 -- Authorization and Consent (Dec 2007)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent-

(1) Embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract; or

(2) Used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance, the entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent herein above granted.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts that are expected to exceed the simplified acquisition threshold. However, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

I.96 52.227-2 -- Notice and Assistance Regarding Patent and Copyright Infringement (Dec. 2007)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in the Contractor's possession pertaining to such claim or suit. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that are expected to exceed the simplified acquisition threshold.

I.97 52.227-3 -- Patent Indemnity (Apr 1984)

(a) The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration, modification, or repair of real property (hereinafter referred to as "construction work") under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work.

(b) This indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense. Further, this indemnity shall not apply to --

(1) An infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or

equipment to be used, or directing a manner of performance of the contract not normally used by the Contractor;

(2) An infringement resulting from addition to or change in supplies or components furnished or construction work performed that was made subsequent to delivery or performance; or

(3) A claimed infringement that is unreasonably settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction.

I.98 52.227-10 -- Filing of Patent Applications -- Classified Subject Matter (Dec 2007)

(a) Before filing or causing to be filed a patent application in the United States disclosing any subject matter of this contract classified "Secret" or higher, the Contractor shall, citing the 30-day provision below, transmit the proposed application to the Contracting Officer. The Government shall determine whether, for reasons of national security, the application should be placed under an order of secrecy, sealed in accordance with the provision of 35 U.S.C. 181-188, or the issuance of a patent otherwise delayed under pertinent United States statutes or regulations. The Contractor shall observe any instructions of the Contracting Officer regarding the manner of delivery of the patent application to the United States Patent Office, but the Contractor shall not be denied the right to file the application. If the Contracting Officer shall not have given any such instructions within 30 days from the date of mailing or other transmittal of the proposed application, the Contractor may file the application.

(b) Before filing a patent application in the United States disclosing any subject matter of this contract classified "Confidential," the Contractor shall furnish to the Contracting Officer a copy of the application for Government determination whether, for reasons of national security, the application should be placed under an order of secrecy or the issuance of a patent should be otherwise delayed under pertinent United States statutes or regulations.

(c) Where the subject matter of this contract is classified for reasons of security, the Contractor shall not file, or cause to be filed, in any country other than in the United States as provided in paragraphs (a) and (b) of this clause, an application or registration for a patent containing any of the subject matter of this contract without first obtaining written approval of the Contracting Officer.

(d) When filing any patent application coming within the scope of this clause, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter and shall promptly furnish to the Contracting Officer the serial number, filing date, and name of the country of any such application. When transmitting the application to the United States Patent Office, the Contractor shall by separate letter identify by agency and number the contract or contracts that require security classification markings to be placed on the application.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts that cover or are likely to cover classified subject matter.

I.99 52.227-16 -- Additional Data Requirements (Jun 1987)

(a) In addition to the data (as defined in the clause at 52.227-14, Rights in Data -- General clause or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract.

(b) The Rights in Data -- General clause or other equivalent included in this contract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall require the Contractor to deliver any data the withholding of which is authorized by the Rights in Data --

General or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.

(c) When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(d) The Contracting Officer may release the Contractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (a) of this clause.

I.100 52.228-5 -- Insurance -- Work on a Government Installation (Jan 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective --

(1) For such period as the laws of the State in which this contract is to be performed prescribe; or

(2) Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

I.101 52.232-11 -- Extras (Apr 1984)

Except as otherwise provided in this contract, no payment for extras shall be made unless such extras and the price therefor have been authorized in writing by the Contracting Officer.

I.102 52.232-9 -- Limitation on Withholding of Payments (Apr 1984)

If more than one clause or Schedule term of this contract authorizes the temporary withholding of amounts otherwise payable to the Contractor for supplies delivered or services performed, the total of the amounts withheld at any one time shall not exceed the greatest amount that may be withheld under any one clause or Schedule term at that time; provided, that this limitation shall not apply to --

(a) Withholdings pursuant to any clause relating to wages or hours of employees;

(b) Withholdings not specifically provided for by this contract;

(c) The recovery of overpayments; and

(d) Any other withholding for which the Contracting Officer determines that this limitation is inappropriate.

I.103 52.232-17 -- Interest (May 2014)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Certified Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 7109, which is applicable to the period in which the amount becomes due, as provided in paragraph (e) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(c) Final Decisions. The Contracting Officer will issue a final decision as required by 33.211 if-

(1) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

(2) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(3) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(d) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(e) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(f) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on-

(1) The date on which the designated office receives payment from the Contractor;

(2) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(3) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(g) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

I.104 52.232-22 -- Limitation of Funds (Apr 1984)

(a) The parties estimate that performance of this contract will not cost the Government more than

(1) the estimated cost specified in the Schedule or,

(2) if this is a cost-sharing contract, the Government's share of the estimated cost specified in the Schedule.

The Contractor agrees to use its best efforts to perform the work specified in the Schedule and all obligations under this contract within the estimated cost, which, if this is a cost-sharing contract, includes both the Government's and the Contractor's share of the cost.

(b) The Schedule specifies the amount presently available for payment by the Government and allotted to this contract, the items covered, the Government's share of the cost if this is a cost-sharing contract, and the period of performance it is estimated the allotted amount will cover. The parties contemplate that the Government will allot additional funds incrementally to the contract up to the full estimated cost to the Government specified in the Schedule, exclusive of any fee. The Contractor agrees to perform, or have performed, work on the contract up to the point at which the total amount paid and payable by the Government under the contract approximates but does not exceed the total amount actually allotted by the Government to the contract.

(c) The Contractor shall notify the Contracting Officer in writing whenever it has reason to believe that the costs it expects to incur under this contract in the next 60 days, when added to all costs previously incurred, will exceed 75 percent of

(1) the total amount so far allotted to the contract by the Government or,

(2) if this is a cost-sharing contract, the amount then allotted to the contract by the Government plus the Contractor's corresponding share.

The notice shall state the estimated amount of additional funds required to continue performance for the period specified in the Schedule.

(d) Sixty days before the end of the period specified in the Schedule, the Contractor shall notify the Contracting Officer in writing of the estimated amount of additional funds, if any, required to continue timely performance under the contract or for any further period specified in the Schedule or otherwise agreed upon, and when the funds will be required.

(e) If, after notification, additional funds are not allotted by the end of the period specified in the Schedule or another agreed-upon date, upon the Contractor's written request the Contracting Officer will terminate this contract on that date in accordance with the provisions of the Termination clause of this contract. If the Contractor estimates that the funds available will allow it to continue to discharge its obligations beyond that date, it may specify a later date in its request, and the Contracting Officer may terminate this contract on that later date.

(f) Except as required by other provisions of this contract, specifically citing and stated to be an exception to this clause --

(1) The Government is not obligated to reimburse the Contractor for costs incurred in excess of the total amount allotted by the Government to this contract; and

(2) The Contractor is not obligated to continue performance under this contract (including actions under the Termination clause of this contract) or otherwise incur costs in excess of --

(i) The amount then allotted to the contract by the Government or;

(ii) If this is a cost-sharing contract, the amount then allotted by the Government to the contract plus the Contractor's corresponding share, until the Contracting Officer notifies the Contractor in writing that the amount allotted by the Government has been increased and specifies an increased amount, which shall then constitute the total amount allotted by the Government to this contract.

(g) The estimated cost shall be increased to the extent that

(1) the amount allotted by the Government or,

(2) if this is a cost-sharing contract, the amount then allotted by the Government to the contract plus the Contractor's corresponding share, exceeds the estimated cost specified in the Schedule.

If this is a cost-sharing contract, the increase shall be allocated in accordance with the formula specified in the Schedule.

(h) No notice, communication, or representation in any form other than that specified in subparagraph (f)(2) above, or from any person other than the Contracting Officer, shall affect the amount allotted by the Government to this contract. In the absence of the specified notice, the Government is not obligated to reimburse the Contractor for any costs in excess of the total amount allotted by the Government to this contract, whether incurred during the course of the contract or as a result of termination.

(i) When and to the extent that the amount allotted by the Government to the contract is increased, any costs the Contractor incurs before the increase that are in excess of --

(1) The amount previously allotted by the Government or;

(2) If this is a cost-sharing contract, the amount previously allotted by the Government to the contract plus the Contractor's corresponding share, shall be allowable to the same extent as if incurred afterward, unless the Contracting Officer issues a termination or other notice and directs that the increase is solely to cover termination or other specified expenses.

(j) Change orders shall not be considered an authorization to exceed the amount allotted by the Government specified in the Schedule, unless they contain a statement increasing the amount allotted.

(k) Nothing in this clause shall affect the right of the Government to terminate this contract. If this contract is terminated, the Government and the Contractor shall negotiate an equitable distribution of all property produced or purchased under the contract, based upon the share of costs incurred by each.

(l) If the Government does not allot sufficient funds to allow completion of the work, the Contractor is entitled to a percentage of the fee specified in the Schedule equaling the percentage of completion of the work contemplated by this contract.

I.105 52.232-23 -- Assignment of Claims (May 2014)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 6305 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

I.106 52.232-25 -- Prompt Payment (Jan 2017)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer (EFT). Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) *Invoice payments* --

(1) *Due date.*

(i) Except as indicated in paragraphs (a)(2) and (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed. For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice; provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) *Certain food products and other payments.*

(i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are --

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.

(ii) If the contract does not require submission of an invoice for payment (*e.g.*, periodic lease payments), the due date will be as specified in the contract.

(3) *Contractor's invoice.* The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs

(a)(3)(i) through (a)(3)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. The Government will take into account untimely notification when computing any interest penalty owed the Contractor.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of the mailing or transmission.)

(iii) Contract number or other authorization for supplies delivered or services performed (including order number and line item number).

(iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.

(v) Shipping and payment terms (*e.g.*, shipment number and date of shipment, discount for prompt payment terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(ix) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (*e.g.*, 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (*e.g.*, 52.232-33, Payment by Electronic funds Transfer- System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer--Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(x) Any other information or documentation required by the contract (*e.g.*, evidence of shipment.)

(4) *Interest penalty.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.

(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(5) *Computing penalty amount.* The Government will compute the interest penalty in accordance with Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance is deemed to occur constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivers the supplies or performs the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. If actual acceptance occurs within the constructive acceptance period, the Government will base the determination of an interest penalty on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(6) *Discounts for prompt payment.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(7) *Additional interest penalty.*

(i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of \$1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.

(ii)

(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall --

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii) The additional penalty does not apply to payments regulated by other Government regulations (*e.g.*, payments under utility contracts subject to tariffs and regulation).

(b) *Contract financing payments.* If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) *Fast payment procedure due dates.* If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.

(d) *Overpayments.* If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall-

(1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the-

(i) Circumstances of the overpayment (*e.g.*, duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(ii) Affected contract number and delivery order number if applicable;

(iii) Affected line item or subline item, if applicable; and

(iv) Contractor point of contact.

(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(e) *Invoices for interim payments.* For interim payments under this cost-reimbursement contract for services--

(1) Paragraphs (a)(2.), (a)(3), (a)(4(ii)), (a)(4(iii)), and (a)(5)(i) do not apply;

(2) For purposes of computing late payment interest penalties that may apply, the due date for payment is the 30th day after the designated billing office receives a proper invoice; and

(3) The Contractor shall submit invoices for interim payments in accordance with paragraph (a) of FAR 52.216-7, Allowable Cost and Payment. If the invoice does not comply with contract requirements, it will be returned within 7 days after the date the designated billing office received the invoice.

I.107 52.232-33 -- Payment by Electronic Funds Transfer-- System for Award Management (Oct 2018)

(a) Method of payment.

(1) All payments by the Government under this contract, shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the System for Award Management (SAM). In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the SAM.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the SAM is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the SAM; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers.

(1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) *EFT and assignment of claims.* If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in the SAM and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a financial institution properly recognized under an assignment of claims pursuant to Subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) *Liability for change of EFT information by financial agent.* The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(i) *Payment information.* The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the SAM.

I.108 52.232-39 - Unenforceability of Unauthorized Obligations (Jun 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulation and procedures.

I.109 52.232-40 - Providing Accelerated Payments to Small Business Subcontractors (Dec 2013)

(a) Upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

I.110 52.233-1 -- Disputes (May 2014)

(a) This contract is subject to 41 U.S.C. chapter 71, Contract Disputes.

(b) Except as provided in 41 U.S.C. chapter 71, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under 41 U.S.C. chapter 71 until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under 41 U.S.C. chapter 71. The submission may be converted to a claim under 41 U.S.C. chapter 71, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)

(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)

(i) The contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding \$100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in 41 U.S.C. chapter 71.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution

(ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from

- (1) the date that the Contracting Officer receives the claim (certified, if required); or
- (2) the date that payment otherwise would be due, if that date is later, until the date of payment.

With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

I.111 52.233-3 -- Protest After Award (Aug. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either --

- (1) Cancel the stop-work order; or
- (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if --

- (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
- (2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

I.112 52.233-4 -- Applicable Law for Breach of Contract Claim (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

I.113 52.236-5 -- Material and Workmanship (Apr 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

I.114 52.239-1 -- Privacy or Security Safeguards (Aug. 1996)

(a) The Contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any safeguards either designed or developed by the Contractor under this contract or otherwise provided by the Government.

(b) To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to the Contractor's facilities, installations, technical capabilities, operations, documentation, records, and databases.

(c) If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.

I.115 52.242-1 -- Notice of Intent to Disallow Costs (Apr 1984)

(a) Notwithstanding any other clause of this contract --

(1) The Contracting Officer may at any time issue to the Contractor a written notice of intent to disallow specified costs incurred or planned for incurrence under this contract that have been determined not to be allowable under the contract terms; and

(2) The Contractor may, after receiving a notice under subparagraph (1) above, submit a written response to the Contracting Officer, with justification for allowance of the costs. If the Contractor does respond within 60 days, the Contracting Officer shall, within 60 days of receiving the response, either make a written withdrawal of the notice or issue a written decision.

(b) Failure to issue a notice under this Notice of Intent to Disallow Costs clause shall not affect the Government's rights to take exception to incurred costs.

I.116 52.242-3 -- Penalties for Unallowable Costs (May 2014)

(a) *Definition.* "Proposal," as used in this clause, means either --

(1) A final indirect cost rate proposal submitted by the Contractor after the expiration of its fiscal year which --

(i) Relates to any payment made on the basis of billing rates; or

(ii) Will be used in negotiating the final contract price; or

(2) The final statement of costs incurred and estimated to be incurred under the Incentive Price Revision clause (if applicable), which is used to establish the final contract price.

(b) Contractors which include unallowable indirect costs in a proposal may be subject to penalties. The penalties are prescribed in 10 U.S.C. 2324 or 41 U.S.C. chapter 43, as applicable, which is implemented in Section 42.709 of the Federal Acquisition Regulation (FAR).

(c) The Contractor shall not include in any proposal any cost that is unallowable, as defined in Subpart 2.1 of the FAR, or an executive agency supplement to the FAR.

(d) If the Contracting Officer determines that a cost submitted by the Contractor in its proposal is expressly unallowable under a cost principle in the FAR, or an executive agency supplement to the FAR, that defines the allowability of specific selected costs, the Contractor shall be assessed a penalty equal to --

(1) The amount of the disallowed cost allocated to this contract; plus

(2) Simple interest, to be computed --

(i) On the amount the Contractor was paid (whether as a progress or billing payment) in excess of the amount to which the Contractor was entitled; and

(ii) Using the applicable rate effective for each six-month interval prescribed by the Secretary of the Treasury pursuant to Pub. L. 92-41 (85 Stat. 97).

(e) If the Contracting Officer determines that a cost submitted by the Contractor in its proposal includes a cost previously determined to be unallowable for that Contractor, then the Contractor will be assessed a penalty in an amount equal to two times the amount of the disallowed cost allocated to this contract.

(f) Determinations under paragraphs (d) and (e) of this clause are final decisions within the meaning of 41 U.S.C. chapter 71, Contract Disputes.

(g) Pursuant to the criteria in FAR 42.709-5, the Contracting Officer may waive the penalties in paragraph (d) or (e) of this clause.

(h) Payment by the Contractor of any penalty assessed under this clause does not constitute repayment to the Government of any unallowable cost which has been paid by the Government to the Contractor.

I.117 52.242-4 -- Certification of Final Indirect Costs (Jan 1997)

(a) The Contractor shall --

- (1) Certify any proposal to establish or modify final indirect cost rates;
- (2) Use the format in paragraph (c) of this clause to certify; and
- (3) Have the certificate signed by an individual of the Contractor's organization at a level no lower than a vice president or chief financial officer of the business segment of the Contractor that submits the proposal.

(b) Failure by the Contractor to submit a signed certificate, as described in this clause, may result in final indirect costs at rates unilaterally established by the Contracting Officer.

(c) The certificate of final indirect costs shall read as follows:

Certificate of Final Indirect Costs

This is to certify that I have reviewed this proposal to establish final indirect cost rates and to the best of my knowledge and belief:

1. All costs included in this proposal (identify proposal and date) to establish final indirect cost rates for (identify period covered by rate) are allowable in accordance with the cost principles of the Federal Acquisition Regulation (FAR) and its supplements applicable to the contracts to which the final indirect cost rates will apply; and
2. This proposal does not include any costs which are expressly unallowable under applicable cost principles of the FAR or its supplements.

Firm: _____

Signature: _____

Name of Certifying Official: _____

Title: _____

Date of Execution: _____

I.118 52.242-13 -- Bankruptcy (Jul 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment of the contract.

I.119 52.243-2 -- Changes -- Cost-Reimbursement (Aug 1987) (Alt I)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

- (1) Description of services to be performed.
- (2) Time of performance (i.e., hours of the day, days of the week, etc.).
- (3) Place of performance of the services.
- (4) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications.
- (5) Method of shipment or packing of supplies.
- (6) Place of delivery.

(b) If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, or otherwise affects any other terms and conditions of this contract, the Contracting Officer shall make an equitable adjustment in the --

- (1) Estimated cost, delivery or completion schedule, or both;
- (2) Amount of any fixed fee; and
- (3) Other affected terms and shall modify the contract accordingly.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(e) Notwithstanding the terms and conditions of paragraphs (a) and (b) above, the estimated cost of this contract and, if this contract is incrementally funded, the funds allotted for the performance of this contract, shall not be increased or considered to be increased except by specific written modification of the contract indicating the new contract estimated cost and, if this contract is incrementally funded, the new amount allotted to the contract. Until this modification is made, the Contractor shall not be obligated to continue performance or incur costs beyond the point established in the Limitation of Cost or Limitation of Funds clause of this contract.

I.120 52.243-6 -- Change Order Accounting (Apr 1984)

The Contracting Officer may require change order accounting whenever the estimated cost of a change or series of related changes exceeds \$100,000. The Contractor, for each change or series of related changes, shall maintain separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less allocable credits) of work, both changed and not changed, allocable to the change. The Contractor shall maintain such accounts until the parties agree to an equitable adjustment for the changes ordered by the Contracting Officer or the matter is conclusively disposed of in accordance with the Disputes clause.

I.121 52.243-7 -- Notification of Changes (Jan 2017)

(a) *Definitions.* "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer.

"Specifically Authorized Representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) *Notice.* The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within ____ (to be negotiated) calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state --

- (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
- (3) The identification of any documents and the substance of any oral communication involved in such conduct;
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including --
 - (i) What line items have been or may be affected by the alleged change;
 - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
 - (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
 - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) *Continued performance.* Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.

(d) *Government response.* The Contracting Officer shall promptly, within ____ (to be negotiated) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either --

- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
- (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or

(4) In the event the Contractor's notice information is inadequate to make a decision under subparagraphs (d)(1), (2), or (3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) *Equitable adjustments.*

(1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made --

- (i) In the contract price or delivery schedule or both; and
- (ii) In such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

NOTE: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

I.122 52.244-2 -- Subcontracts (Oct 2010)

(a) *Definitions.* As used in this clause-

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR)

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that-

- (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
- (2) Is fixed-price and exceeds-
 - (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

None

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

- (i) A description of the supplies or services to be subcontracted.
- (ii) Identification of the type of subcontract to be used.
- (iii) Identification of the proposed subcontractor.
- (iv) The proposed subcontract price.
- (v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
- (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
- (vii) A negotiation memorandum reflecting -
 - (A) The principal elements of the subcontract price negotiations;
 - (B) The most significant considerations controlling establishment of initial or revised prices;
 - (C) The reason certified cost or pricing data were or were not required;
 - (D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;
 - (E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
 - (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
 - (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c), or (d) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination -

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:
[CO fill in at definitization]

I.123 52.244-5 -- Competition in Subcontracting (Dec 1996)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protégé Program (Pub. L. 101-510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its protégés.

I.124 52.244-6 -- Subcontracts for Commercial Items (Jan 2019)

(a) *Definitions.* As used in this clause-

“Commercial item and commercially available off-the-shelf item” have the meanings contained Federal Acquisition Regulation 2.101, Definitions.

“Subcontract” includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)

(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (Oct 2015) (41 U.S.C. 3509), if the subcontract exceeds \$5.5 million and has a performance period of more than 120 days. In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(ii) 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (Jun 2010) (Section 1553 of Pub. L. 111-5), if the subcontract is funded under the Recovery Act.

(iii) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017).

(iv) 52.204-21, Basic Safeguarding of Covered Contractor Information Systems (JUN 2016) other than subcontracts for commercially available off-the-shelf items, if flow down is required in accordance with paragraph (c) of FAR clause 52.204-21.

(v) 52.204-23, Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (JUL 2018) (Section 1634 of Pub. L. 115-91).

(vi) 52.219-8, Utilization of Small Business Concerns (Oct 2018) (15 U.S.C. 637(d)(2) and (3)), if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$700,000 (\$1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(vii) 52.222-21, Prohibition of Segregated Facilities (Apr 2015).

(viii) 52.222-26, Equal Opportunity (Sep 2016) (E.O. 11246).

(ix) 52.222-35, Equal Opportunity for Veterans (Oct 2015) (38 U.S.C. 4212(a));

(x) 52.222-36, Equal Opportunity for Workers with Disabilities (Jul 2014) (29 U.S.C. 793).

(xi) 52.222-37, Employments Reports on Veterans (Feb 2016) (38 U.S.C. 4212).

(xii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496), if flow down is required in accordance with paragraph (f) of FAR clause 52.222-40.

(xiii)

(A) 52.222-50, Combating Trafficking in Persons (Jan 2019) (22 U.S.C. chapter 78 and E.O. 13627).

(B) Alternate I (Mar 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O. 13627).

(xiv) 52.222-55, Minimum Wages under Executive Order 13658 (Dec 2015), if flowdown is required in accordance with paragraph (k) of FAR clause 52.222-55.

(xv) 52.222-62, Paid Sick Leave Under Executive Order 13706 (JAN 2017) (E.O. 13706), if flow down is required in accordance with paragraph (m) of FAR clause 52.222-62.

(xvi)

(A) 52.224-3, Privacy Training (JAN 2017) (5 U.S.C. 552a) if flow down is required in accordance with 52.224-3(f).

(B) Alternate I (JAN 2017) of 52.224-3, if flow down is required in accordance with 52.224-3(f) and the agency specifies that only its agency-provided training is acceptable.

(xvii) 52.225-26, Contractors Performing Private Security Functions Outside the United States (Oct 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xviii) 52.232-40, Providing Accelerated Payments to Small Business Subcontractors (Dec 2013), if flow down is required in accordance with paragraph (c) of FAR clause 52.232-40.

(xix) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. App. 1241 and 10 U.S.C. 2631), if flow down is required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

I.125 52.245-1 -- Government Property (Jan 2017)

(a) *Definitions.* As used in this clause-

“Cannibalize” means to remove parts from Government property for use or for installation on other Government property.

“Contractor-acquired property” means property acquired, fabricated, or otherwise provided by the Contractor for performing a contract, and to which the Government has title.

“Contractor inventory” means-

- (1) Any property acquired by and in the possession of a Contractor or subcontractor under a contract for which title is vested in the Government and which exceeds the amounts needed to complete full performance under the entire contract;
- (2) Any property that the Government is obligated or has the option to take over under any type of contract, e.g., as a result either of any changes in the specifications or plans thereunder or of the termination of the contract (or subcontract thereunder), before completion of the work, for the convenience or at the option of the Government; and
- (3) Government-furnished property that exceeds the amounts needed to complete full performance under the entire contract.

“Contractor's managerial personnel” means the Contractor's directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of-

- (1) All or substantially all of the Contractor's business;
- (2) All or substantially all of the Contractor's operation at any one plant or separate location; or
- (3) A separate and complete major industrial operation.

“Demilitarization” means rendering a product unusable for, and not restorable to, the purpose for which it was designed or is customarily used.

“Discrepancies incident to shipment” means any differences (*e.g.*, count or condition) between the items documented to have been shipped and items actually received.

“Equipment” means a tangible item that is functionally complete for its intended purpose, durable, nonexpendable, and needed for the performance of a contract. Equipment is not intended for sale, and does not ordinarily lose its identity or become a component part of another article when put into use. Equipment does not include material, real property, special test equipment or special tooling.

“Government-furnished property” means property in the possession of, or directly acquired by, the Government and subsequently furnished to the Contractor for performance of a contract. Government-furnished property includes, but is not limited to, spares and property furnished for repair, maintenance, overhaul, or modification. Government-furnished property also includes contractor-acquired property if the contractor-acquired property is a deliverable under a cost contract when accepted by the Government for continued use under the contract.

“Government property” means all property owned or leased by the Government. Government property includes both Government-furnished and Contractor-acquired property. Government property includes material, equipment, special tooling, special test equipment, and real property. Government property does not include intellectual property and software.

“Loss of Government Property” means unintended, unforeseen or accidental loss, damage or destruction to Government property that reduces the Government's expected economic benefits of the property. Loss of Government property does not include purposeful destructive testing, obsolescence, normal wear and tear or manufacturing defects. Loss of Government property includes, but is not limited to-

(1) Items that cannot be found after a reasonable search:

(2) Theft:

(3) Damage resulting in unexpected harm to property requiring repair to restore the item to usable condition; or

(4) Destruction resulting from incidents that render the item useless for its intended purpose or beyond economical repair.

“Material” means property that may be consumed or expended during the performance of a contract, component parts of a higher assembly, or items that lose their individual identity through incorporation into an end item. Material does not include equipment, special tooling, special test equipment or real property.

“Nonseverable” means property that cannot be removed after construction or installation without substantial loss of value or damage to the installed property or to the premises where installed.

“Precious metals” means silver, gold, platinum, palladium, iridium, osmium, rhodium, and ruthenium.

“Production scrap” means unusable material resulting from production, engineering, operations and maintenance, repair, and research and development contract activities. Production scrap may have value when re-melted or reprocessed, e.g., textile and metal clippings, borings, and faulty castings and forgings.

“Property” means all tangible property, both real and personal.

“Property Administrator” means an authorized representative of the Contracting Officer appointed in accordance with agency procedures, responsible for administering the contract requirements and obligations relating to Government property in the possession of a Contractor.

“Property records” means the records created and maintained by the contractor in support of its stewardship responsibilities for the management of Government property.

“Provide” means to furnish, as in Government-furnished property, or to acquire, as in contractor-acquired property.

“Real property” See Federal Management Regulation 102-71.20 (41 CFR 102-71.20).

“Sensitive property” means property potentially dangerous to the public safety or security if stolen, lost, or misplaced, or that shall be subject to exceptional physical security, protection, control, and accountability. Examples include weapons, ammunition, explosives, controlled substances, radioactive materials, hazardous materials or wastes, or precious metals.

“Unit acquisition cost” means-

(1) For Government-furnished property, the dollar value assigned by the Government and identified in the contract; and

(2) For contractor-acquired property, the cost derived from the Contractor’s records that reflect consistently applied generally accepted accounting principles.

(b) *Property management.*

(1) The Contractor shall have a system of internal controls to manage (control, use, preserve, protect, repair and maintain) Government property in its possession. The system shall be adequate to satisfy the requirements of this clause. In doing so, the Contractor shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective and efficient control of Government property. The Contractor shall disclose any significant changes to its property management system to the Property Administrator prior to implementation of the changes. The Contractor may employ customary commercial practices, voluntary consensus standards, or industry-leading practices and standards that provide effective and efficient

Government property management that are necessary and appropriate for the performance of this contract (except where inconsistent with law or regulation).

(2) The Contractor's responsibility extends from the initial acquisition and receipt of property, through stewardship, custody, and use until formally relieved of responsibility by authorized means, including delivery, consumption, expending, sale (as surplus property), or other disposition, or via a completed investigation, evaluation, and final determination for lost property. This requirement applies to all Government property under the Contractor's accountability, stewardship, possession or control, including its vendors or subcontractors (see paragraph (f)(1)(v) of this clause).

(3) The Contractor shall include the requirements of this clause in all subcontracts under which Government property is acquired or furnished for subcontract performance.

(4) The Contractor shall establish and maintain procedures necessary to assess its property management system effectiveness and shall perform periodic internal reviews, surveillances, self assessments, or audits. Significant findings or results of such reviews and audits pertaining to Government property shall be made available to the Property Administrator.

(c) Use of Government property.

(1) The Contractor shall use Government property, either furnished or acquired under this contract, only for performing this contract, unless otherwise provided for in this contract or approved by the Contracting Officer.

(2) Modifications or alterations of Government property are prohibited, unless they are-

- (i) Reasonable and necessary due to the scope of work under this contract or its terms and conditions;
- (ii) Required for normal maintenance; or
- (iii) Otherwise authorized by the Contracting Officer.

(3) The Contractor shall not cannibalize Government property unless otherwise provided for in this contract or approved by the Contracting Officer.

(d) Government-furnished property.

(1) The Government shall deliver to the Contractor the Government-furnished property described in this contract. The Government shall furnish related data and information needed for the intended use of the property. The warranties of suitability of use and timely delivery of Government-furnished property do not apply to property acquired or fabricated by the Contractor as contractor-acquired property and subsequently transferred to another contract with this Contractor.

(2) The delivery and/or performance dates specified in this contract are based upon the expectation that the Government-furnished property will be suitable for contract performance and will be delivered to the Contractor by the dates stated in the contract.

- (i) If the property is not delivered to the Contractor by the dates stated in the contract, the Contracting Officer shall, upon the Contractor's timely written request, consider an equitable adjustment to the contract.
- (ii) In the event property is received by the Contractor, or for Government-furnished property after receipt and installation, in a condition not suitable for its intended use, the Contracting Officer shall, upon the Contractor's timely written request, advise the Contractor on a course of action to remedy the problem. Such action may include repairing, replacing, modifying, returning, or otherwise disposing of the property at the Government's

expense. Upon completion of the required action(s), the Contracting Officer shall consider an equitable adjustment to the contract (see also paragraph (f)(1)(ii)(A) of this clause).

(iii) The Government may, at its option, furnish property in an “as-is” condition. The Contractor will be given the opportunity to inspect such property prior to the property being provided. In such cases, the Government makes no warranty with respect to the serviceability and/or suitability of the property for contract performance. Any repairs, replacement, and/or refurbishment shall be at the Contractor's expense.

(3)(i) The Contracting Officer may by written notice, at any time-

(A) Increase or decrease the amount of Government-furnished property under this contract;

(B) Substitute other Government-furnished property for the property previously furnished, to be furnished, or to be acquired by the Contractor for the Government under this contract; or

(C) Withdraw authority to use property.

(ii) Upon completion of any action(s) under paragraph (d)(3)(i) of this clause, and the Contractor's timely written request, the Contracting Officer shall consider an equitable adjustment to the contract.

(e) *Title to Government property.*

(1) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as “Government property”), is subject to the provisions of this clause. The Government shall retain title to all Government-furnished property. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

(2) Title vests in the Government for all property acquired or fabricated by the Contractor in accordance with the financing provisions or other specific requirements for passage of title in the contract. Under fixed price type contracts, in the absence of financing provisions or other specific requirements for passage of title in the contract, the Contractor retains title to all property acquired by the Contractor for use on the contract, except for property identified as a deliverable end item. If a deliverable item is to be retained by the Contractor for use after inspection and acceptance by the Government, it shall be made accountable to the contract through a contract modification listing the item as Government-furnished property.

(3) *Title under Cost-Reimbursement or Time-and-Material Contracts or Cost-Reimbursable line items under Fixed-Price contracts.*

(i) Title to all property purchased by the Contractor for which the Contractor is entitled to be reimbursed as a direct item of cost under this contract shall pass to and vest in the Government upon the vendor's delivery of such property.

(ii) Title to all other property, the cost of which is reimbursable to the Contractor, shall pass to and vest in the Government upon-

(A) Issuance of the property for use in contract performance;

(B) Commencement of processing of the property for use in contract performance; or

(C) Reimbursement of the cost of the property by the Government, whichever occurs first.

(f) *Contractor plans and systems.*

(1) Contractors shall establish and implement property management plans, systems, and procedures at the contract, program, site or entity level to enable the following outcomes:

(i) *Acquisition of Property.* The Contractor shall document that all property was acquired consistent with its engineering, production planning, and property control operations.

(ii) *Receipt of Government Property.* The Contractor shall receive Government property and document the receipt, record the information necessary to meet the record requirements of paragraph (f)(1)(iii)(A)(1) through (5) of this clause, identify as Government owned in a manner appropriate to the type of property (*e.g.*, stamp, tag, mark, or other identification), and manage any discrepancies incident to shipment.

(A) *Government-furnished property.* The Contractor shall furnish a written statement to the Property Administrator containing all relevant facts, such as cause or condition and a recommended course(s) of action, if overages, shortages, or damages and/or other discrepancies are discovered upon receipt of Government-furnished property.

(B) *Contractor-acquired property.* The Contractor shall take all actions necessary to adjust for overages, shortages, damage and/or other discrepancies discovered upon receipt, in shipment of Contractor-acquired property from a vendor or supplier, so as to ensure the proper allocability and allowability of associated costs.

(iii) *Records of Government property.* The Contractor shall create and maintain records of all Government property accountable to the contract, including Government-furnished and Contractor-acquired property.

(A) Property records shall enable a complete, current, auditable record of all transactions and shall, unless otherwise approved by the Property Administrator, contain the following:

(1) The name, part number and description, National Stock Number (if needed for additional item identification tracking and/or disposition) and other data elements as necessary and required in accordance with the terms and conditions of the contract.

(2) Quantity received (or fabricated), issued, and balance-on-hand.

(3) Unit acquisition cost.

(4) Unique-item identifier or equivalent (if available and necessary for individual item tracking).

(5) Unit of measure.

(6) Accountable contract number or equivalent code designation.

(7) Location.

(8) Disposition.

(9) Posting reference and date of transaction.

(10) Date placed in service (if required in accordance with the terms and conditions of the contract).

(B) *Use of a Receipt and Issue System for Government Material.* When approved by the Property Administrator, the Contractor may maintain, in lieu of formal

property records, a file of appropriately cross-referenced documents evidencing receipt, issue, and use of material that is issued for immediate consumption.

(iv) *Physical inventory.* The Contractor shall periodically perform, record, and disclose physical inventory results. A final physical inventory shall be performed upon contract completion or termination. The Property Administrator may waive this final inventory requirement, depending on the circumstances (*e.g.*, overall reliability of the Contractor's system or the property is to be transferred to a follow-on contract).

(v) *Subcontractor control.*

(A) The Contractor shall award subcontracts that clearly identify items to be provided and the extent of any restrictions or limitations on their use. The Contractor shall ensure appropriate flow down of contract terms and conditions (*e.g.*, extent of liability for loss of Government property).

(B) The Contractor shall assure its subcontracts are properly administered and reviews are periodically performed to determine the adequacy of the subcontractor's property management system.

(vi) *Reports.* The Contractor shall have a process to create and provide reports of discrepancies, loss of Government property, physical inventory results, audits and self-assessments, corrective actions, and other property related reports as directed by the Contracting Officer.

(vii) *Relief of stewardship responsibility and liability.* The Contractor shall have a process to enable the prompt recognition, investigation, disclosure and reporting of loss of Government property, including losses that occur at subcontractor or alternate site locations.

(A) This process shall include the corrective actions necessary to prevent recurrence.

(B) Unless otherwise directed by the Property Administrator, the Contractor shall investigate and report to the Government all incidents of property loss as soon as the facts become known. Such reports shall, at a minimum, contain the following information:

(1) Date of incident (if known).

(2) The data elements required under paragraph (f)(1)(iii)(A) of this clause.

(3) Quantity.

(4) Accountable contract number.

(5) A statement indicating current or future need.

(6) Unit acquisition cost, or if applicable, estimated sales proceeds, estimated repair or replacement costs.

(7) All known interests in commingled material of which includes Government material.

(8) Cause and corrective action taken or to be taken to prevent recurrence.

(9) A statement that the Government will receive compensation covering the loss of Government property, in the event the Contractor was or will be reimbursed or compensated.

(10) Copies of all supporting documentation.

(11) Last known location.

(12) A statement that the property did or did not contain sensitive, export controlled, hazardous, or toxic material, and that the appropriate agencies and authorities were notified.

(C) Unless the contract provides otherwise, the Contractor shall be relieved of stewardship responsibility and liability for property when-

(1) Such property is consumed or expended, reasonably and properly, or otherwise accounted for, in the performance of the contract, including reasonable inventory adjustments of material as determined by the Property Administrator;

(2) Property Administrator grants relief of responsibility and liability for loss of Government property;

(3) Property is delivered or shipped from the Contractor's plant, under Government instructions, except when shipment is to a subcontractor or other location of the Contractor; or

(4) Property is disposed of in accordance with paragraphs (j) and (k) of this clause.

(viii) *Utilizing Government property.*

(A) The Contractor shall utilize, consume, move, and store Government Property only as authorized under this contract. The Contractor shall promptly disclose and report Government property in its possession that is excess to contract performance.

(B) Unless otherwise authorized in this contract or by the Property Administrator the Contractor shall not commingle Government material with material not owned by the Government.

(ix) *Maintenance.* The Contractor shall properly maintain Government property. The Contractor's maintenance program shall enable the identification, disclosure, and performance of normal and routine preventative maintenance and repair. The Contractor shall disclose and report to the Property Administrator the need for replacement and/or capital rehabilitation.

(x) *Property closeout.* The Contractor shall promptly perform and report to the Property Administrator contract property closeout, to include reporting, investigating and securing closure of all loss of Government property cases; physically inventorying all property upon termination or completion of this contract; and disposing of items at the time they are determined to be excess to contractual needs.

(2) The Contractor shall establish and maintain Government accounting source data, as may be required by this contract, particularly in the areas of recognition of acquisitions, loss of Government property, and disposition of material and equipment.

(g) *Systems analysis.*

(1) The Government shall have access to the contractor's premises and all Government property, at reasonable times, for the purposes of reviewing, inspecting and evaluating the Contractor's property management plan(s), systems, procedures, records, and supporting documentation that pertains to Government property. This access includes all site locations and, with the Contractor's consent, all subcontractor premises.

(2) Records of Government property shall be readily available to authorized Government personnel and shall be appropriately safeguarded.

(3) Should it be determined by the Government that the Contractor's (or subcontractor's) property management practices are inadequate or not acceptable for the effective management and control of Government property under this contract, or present an undue risk to the Government, the Contractor shall prepare a corrective action plan when requested by the Property Administrator and take all necessary corrective actions as specified by the schedule within the corrective action plan.

(4) The Contractor shall ensure Government access to subcontractor premises, and all Government property located at subcontractor premises, for the purposes of reviewing, inspecting and evaluating the subcontractor's property management plan, systems, procedures, records, and supporting documentation that pertains to Government property.

(h) *Contractor Liability for Government Property.*

(1) Unless otherwise provided for in the contract, the Contractor shall not be liable for loss of Government property furnished or acquired under this contract, except when any one of the following applies-

(i) The risk is covered by insurance or the Contractor is otherwise reimbursed (to the extent of such insurance or reimbursement). The allowability of insurance costs shall be determined in accordance with 31.205-19.

(ii) Loss of Government property that is the result of willful misconduct or lack of good faith on the part of the Contractor's managerial personnel.

(iii) The Contracting Officer has, in writing, revoked the Government's assumption of risk for loss of Government property due to a determination under paragraph (g) of this clause that the Contractor's property management practices are inadequate, and/or present an undue risk to the Government, and the Contractor failed to take timely corrective action. If the Contractor can establish by clear and convincing evidence that the loss of Government property occurred while the Contractor had adequate property management practices or the loss did not result from the Contractor's failure to maintain adequate property management practices, the Contractor shall not be held liable.

(2) The Contractor shall take all reasonable actions necessary to protect the property from further loss. The Contractor shall separate the damaged and undamaged property, place all the affected property in the best possible order, and take such other action as the Property Administrator directs.

(3) The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any loss of Government property.

(4) The Contractor shall reimburse the Government for loss of Government property, to the extent that the Contractor is financially liable for such loss, as directed by the Contracting Officer.

(5) Upon the request of the Contracting Officer, the Contractor shall, at the Government's expense, furnish to the Government all reasonable assistance and cooperation, including the prosecution of suit and the execution of instruments of assignment in favor of the Government in obtaining recovery.

(i) *Equitable adjustment.* Equitable adjustments under this clause shall be made in accordance with the procedures of the Changes clause. However, the Government shall not be liable for breach of contract for the following:

(1) Any delay in delivery of Government-furnished property.

(2) Delivery of Government-furnished property in a condition not suitable for its intended use.

(3) An increase, decrease, or substitution of Government-furnished property.

(4) Failure to repair or replace Government property for which the Government is responsible. Standard Form 1428.

(j) *Contractor inventory disposal*. Except as otherwise provided for in this contract, the Contractor shall not dispose of Contractor inventory until authorized to do so by the Plant Clearance Officer or authorizing official.

(1) *Predisposal requirements*.

(i) If the Contractor determines that the property has the potential to fulfill requirements under other contracts, the Contractor, in consultation with the Property Administrator, shall request that the Contracting Officer transfer the property to the contract in question, or provide authorization for use, as appropriate. In lieu of transferring the property, the Contracting Officer may authorize the Contractor to credit the costs of Contractor-acquired property (material only) to the losing contract, and debit the gaining contract with the corresponding cost, when such material is needed for use on another contract. Property no longer needed shall be considered contractor inventory.

(ii) For any remaining Contractor-acquired property, the Contractor may purchase the property at the unit acquisition cost if desired or make reasonable efforts to return unused property to the appropriate supplier at fair market value (less, if applicable, a reasonable restocking fee that is consistent with the supplier's customary practices.)

(2) *Inventory disposal schedules*.

(i) Absent separate contract terms and conditions for property disposition, and provided the property was not reutilized, transferred, or otherwise disposed of, the Contractor, as directed by the Plant Clearance Officer or authorizing official, shall use Standard Form 1428, Inventory Disposal Schedule or electronic equivalent, to identify and report-

(A) Government-furnished property that is no longer required for performance of this contract;

(B) Contractor-acquired property, to which the Government has obtained title under paragraph (e) of this clause, which is no longer required for performance of that contract; and

(C) Termination inventory.

(ii) The Contractor may annotate inventory disposal schedules to identify property the Contractor wishes to purchase from the Government, in the event that the property is offered for sale.

(iii) Separate inventory disposal schedules are required for aircraft in any condition, flight safety critical aircraft parts, and other items as directed by the Plant Clearance Officer

(iv) The Contractor shall provide the information required by FAR 52.245-1(f)(1)(iii) along with the following:

(A) Any additional; information that may facilitate understanding of the property's intended use.

(B) For work-in-progress, the estimated percentage of completion.

(C) For precious metals in raw or bulk form, the type of metal and estimated weight.

(D) For hazardous material or property contaminated with hazardous material, the type of hazardous material.

(E) For metals in mill product form, the form, shape, treatment, hardness, temper, specification (commercial or Government) and dimensions (thickness, width and length).

(v) Property with the same description, condition code, and reporting location may be grouped in a single line item.

(vi) Scrap should be reported by "lot" along with metal content, estimated weight and estimated value.

(3) *Submission requirements.*

(i) The Contractor shall submit inventory disposal schedules to the Plant Clearance Officer no later than-

(A) 30 days following the Contractor's determination that a property item is no longer required for performance of this contract;

(B) 60 days, or such longer period as may be approved by the Plant Clearance Officer, following completion of contract deliveries or performance; or

(C) 120 days, or such longer period as may be approved by the Termination Contracting Officer, following contract termination in whole or in part.

(ii) Unless the Plant Clearance Officer determines otherwise, the Contractor need not identify or report production scrap on inventory disposal schedules, and may process and dispose of production scrap in accordance with its own internal scrap procedures. The processing and disposal of other types of Government-owned scrap will be conducted in accordance with the terms and conditions of the contract or Plant Clearance Officer direction, as appropriate.

(4) *Corrections.* The Plant Clearance Officer may-

(i) Reject a schedule for cause (*e.g.*, contains errors, determined to be inaccurate); and

(ii) Require the Contractor to correct an inventory disposal schedule.

(5) *Postsubmission adjustments.* The Contractor shall notify the Plant Clearance Officer at least 10 working days in advance of its intent to remove an item from an approved inventory disposal schedule. Upon approval of the Plant Clearance Officer, or upon expiration of the notice period, the Contractor may make the necessary adjustments to the inventory schedule.

(6) *Storage.*

(i) The Contractor shall store the property identified on an inventory disposal schedule pending receipt of disposal instructions. The Government's failure to furnish disposal instructions within 120 days following acceptance of an inventory disposal schedule may entitle the Contractor to an equitable adjustment for costs incurred to store such property on or after the 121st day.

(ii) The Contractor shall obtain the Plant Clearance Officer's approval to remove property from the premises where the property is currently located prior to receipt of final disposition instructions. If approval is granted, any costs incurred by the Contractor to transport or store the property shall not increase the price or fee of any Government contract. The storage area shall be appropriate for assuring the property's physical safety and suitability for use. Approval does not relieve the Contractor of any liability for such property under this contract.

(7) *Disposition instructions.*

(i) The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of Contractor inventory as directed by the Plant Clearance Officer. Unless otherwise directed by the Contracting Officer or by the Plant Clearance Officer, the Contractor shall remove and destroy any markings identifying the property as U.S. Government-owned property prior to its disposal.

(ii) The Contracting Officer may require the Contractor to demilitarize the property prior to shipment or disposal. In such cases, the Contractor may be entitled to an equitable adjustment under paragraph (i) of this clause.

(8) *Disposal proceeds.* As directed by the Contracting Officer, the Contractor shall credit the net proceeds from the disposal of Contractor inventory to the contract, or to the Treasury of the United States as miscellaneous receipts.

(9) *Subcontractor inventory disposal schedules.* The Contractor shall require its Subcontractors to submit inventory disposal schedules to the Contractor in accordance with the requirements of paragraph (j)(3) of this clause.

(k) *Abandonment of Government property.*

(1) The Government shall not abandon sensitive property or termination inventory without the Contractor's written consent.

(2) The Government, upon notice to the Contractor, may abandon any nonsensitive property in place, at which time all obligations of the Government regarding such property shall cease.

(3) Absent contract terms and conditions to the contrary, the Government may abandon parts removed and replaced from property as a result of normal maintenance actions, or removed from property as a result of the repair, maintenance, overhaul, or modification process.

(4) The Government has no obligation to restore or rehabilitate the Contractor's premises under any circumstances; however, if Government-furnished property is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (i) of this clause may properly include restoration or rehabilitation costs.

(l) *Communication.* All communications under this clause shall be in writing.

(m) *Contracts outside the United States.* If this contract is to be performed outside of the United States and its outlying areas, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

I.126 52.245-9 -- Use and Charges (Apr 2012)

(a) *Definitions.* Definitions applicable to this contract are provided in the clause at 52.245-1, Government Property. Additional definitions as used in this clause include:

"Rental period" means the calendar period during which Government property is made available for nongovernmental purposes.

"Rental time" means the number of hours, to the nearest whole hour, rented property is actually used for nongovernmental purposes. It includes time to set up the property for such purposes, perform required maintenance, and restore the property to its condition prior to rental (less normal wear and tear).

(b) *Use of Government property.* The Contractor may use the Government property without charge in the performance of-

(1) Contracts with the Government that specifically authorize such use without charge;

(2) Subcontracts of any tier under Government prime contracts if the Contracting Officer having cognizance of the prime contract-

(i) Approves a subcontract specifically authorizing such use; or

(ii) Otherwise authorizes such use in writing; and

(3) Other work, if the Contracting Officer specifically authorizes in writing use without charge for such work.

(c) *Rental.* If granted written permission by the Contracting Officer, or if it is specifically provided for in the Schedule, the Contractor may use the Government property (except material) for a rental fee for work other than that provided in paragraph (b) of this clause. Authorizing such use of the Government property does not waive any rights of the Government to terminate the Contractor's right to use the Government property. The rental fee shall be determined in accordance with the following paragraphs.

(d) *General.*

(1) Rental requests shall be submitted to the Administrative Contracting Officer (ACO), identify the property for which rental is requested, propose a rental period, and compute an estimated rental charge by using the Contractor's best estimate of rental time in the formulae described in paragraph (e) of this clause.

(2) The Contractor shall not use Government property for nongovernmental purposes, including Independent Research and Development, until a rental charge for real property, or estimated rental charge for other property, is agreed upon. Rented property shall be used only on a non-interference basis.

(e) *Rental charge.-*

(1) *Real property and associated fixtures.*

(i) The Contractor shall obtain, at its expense, a property appraisal from an independent licensed, accredited, or certified appraiser that computes a monthly, daily or hourly rental rate for comparable commercial property. The appraisal may be used to compute rentals under this clause throughout its effective period or, if an effective period is not stated in the appraisal, for one year following the date the appraisal was performed. The Contractor shall submit the appraisal to the ACO at least 30 days prior to the date the property is needed for nongovernmental use. Except as provided in paragraph (e)(1)(iii) of this clause, the ACO shall use the appraisal rental rate to determine a reasonable rental charge.

(ii) Rental charges shall be determined by multiplying the rental time by the appraisal rental rate expressed as a rate per hour. Monthly or daily appraisal rental rates shall be divided by 720 or 24, respectively, to determine an hourly rental rate.

(iii) When the ACO believes the appraisal rental rate is unreasonable, the ACO shall promptly notify the Contractor. The parties may agree on an alternative means for computing a reasonable rental charge.

(iv) The Contractor shall obtain, at its expense, additional property appraisals in the same manner as provided in paragraph (e)(1)(i) if the effective period has expired and the Contractor desires the continued use of property for nongovernmental use. The Contractor may obtain additional appraisals within the effective period of the current appraisal if the market prices decrease substantially.

(2) *Other Government property.* The Contractor may elect to compute the rental charge using the appraisal method described in paragraph (e)(1) of this clause subject to the constraints therein or the following formula in which rental time shall be expressed in increments of not less than one

hour with portions of hours rounded to the next higher hour: The hourly rental charge is calculated by multiplying 2 percent of the acquisition cost by the hours of rental time, and dividing by 720.

(3) *Alternative methodology.* The Contractor may request consideration of an alternative basis for computing the rental charge if it considers the monthly rental rate or a time-based rental unreasonable or impractical.

(f) *Rental payments.*

(1) Rent is due 60 days following completion of the rental period or as otherwise specified in the contract. The Contractor shall compute the rental due, and furnish records or other supporting data in sufficient detail to permit the ACO to verify the rental time and computation. Payment shall be made by check payable to the Treasurer of the United States and sent to the contract administration office identified in the contract, unless otherwise specified by the Contracting Officer.

(2) Interest will be charged if payment is not made by the date specified in paragraph (f)(1) of this clause. Interest will accrue at the "Renegotiation Board Interest Rate" (published in the *Federal Register* semiannually on or about January 1st and July 1st) for the period in which the rent is due.

(3) The Government's acceptance of any rental payment under this clause, in whole or in part, shall not be construed as a waiver or relinquishment of any rights it may have against the Contractor stemming from the Contractor's unauthorized use of Government property or any other failure to perform this contract according to its terms

(g) *Use revocation.* At any time during the rental period the Government may revoke nongovernmental use authorization and require the Contractor, at the Contractor's expense, to return the property to the Government, restore the property to its pre-rental condition (less normal wear and tear), or both.

(h) *Unauthorized use.* The unauthorized use of Government property can subject a person to fines, imprisonment, or both under 18 U.S.C. 641.

I.127 52.246-25 -- Limitation of Liability - Services (Feb 1997)

(a) Except as provided in paragraphs (b) and (c) below, and except to the extent that the Contractor is expressly responsible under this contract for deficiencies in the services required to be performed under it (including any materials furnished in conjunction with those services), the Contractor shall not be liable for loss of or damage to property of the Government that --

(1) Occurs after Government acceptance of services performed under this contract; and

(2) Results from any defects or deficiencies in the services performed or materials furnished.

(b) The limitation of liability under paragraph (a) above shall not apply when a defect or deficiency in, or the Government's acceptance of, services performed or materials furnished results from willful misconduct or lack of good faith on the part of any of the Contractor's managerial personnel. The term "Contractor's managerial personnel," as used in this clause, means the Contractor's directors, officers, and any of the Contractor's managers, superintendents, or equivalent representatives who have supervision or direction of --

(1) All or substantially all of the Contractor's business;

(2) All or substantially all of the Contractor's operations at any one plant, laboratory, or separate location at which the contract is being performed; or

(3) A separate and complete major industrial operation connected with the performance of this contract.

(c) If the Contractor carries insurance, or has established a reserve for self-insurance, covering liability for loss or damage suffered by the Government through the Contractor's performance of services or

furnishing of materials under this contract, the Contractor shall be liable to the Government, to the extent of such insurance or reserve, for loss of or damage to property of the Government occurring after Government acceptance of, and resulting from any defects and deficiencies in, services performed or materials furnished under this contract.

I.128 52.247-1 -- Commercial Bill of Lading Notations (Feb 2006)

When the Contracting Officer authorizes supplies to be shipped on a commercial bill of lading and the Contractor will be reimbursed these transportation costs as direct allowable costs, the Contractor shall ensure before shipment is made that the commercial shipping documents are annotated with either of the following notations, as appropriate:

(a) If the Government is shown as the consignor or the consignee, the annotation shall be:

Transportation is for the Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee are assignable to, and shall be reimbursed by, the Government.

(b) If the Government is not shown as the consignor or the consignee, the annotation shall be:

Transportation is for the Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by the Government, pursuant to cost-reimbursement contract No. 89303519NE000005. This may be confirmed by contacting the Contract Administration Office specified in Section G.

I.129 52.247-63 -- Preference for U.S.-Flag Air Carriers (June 2003)

(a) *Definitions.* As used in this clause--

“International air transportation” means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.

“United States” means the 50 States, the District of Columbia, and outlying areas.

“U.S.-flag air carrier” means an air carrier holding a certificate under 49 U.S.C. Chapter 411.

(b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) (Fly America Act) requires that all Federal agencies and Government contractors and subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

(c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag carriers for international air transportation of personnel (and their personal effects) or property.

(d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

Statement of Unavailability of U.S.-Flag Air Carriers

International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons (see section 47.403 of the Federal Acquisition Regulation): *[State reasons]*:

(End of statement)

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase under this contract that may involve international air transportation.

I.130 52.249-6 -- Termination (Cost-Reimbursement) (May 2004)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part, if --

(1) The Contracting Officer determines that a termination is in the Government's interest; or

(2) The Contractor defaults in performing this contract and fails to cure the default within 10 days (unless extended by the Contracting Officer) after receiving a notice specifying the default. "Default" includes failure to make progress in the work so as to endanger performance.

(b) The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying whether termination is for default of the Contractor or for convenience of the Government, the extent of termination, and the effective date. If, after termination for default, it is determined that the Contractor was not in default or that the Contractor's failure to perform or to make progress in performance is due to causes beyond the control and without the fault or negligence of the Contractor as set forth in the Excusable Delays clause, the rights and obligations of the parties will be the same as if the termination was for the convenience of the Government.

(c) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause), except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts, the cost of which would be reimbursable in whole or in part, under this contract; approval or ratification will be final for purposes of this clause.

(6) Transfer title (if not already transferred) and, as directed by the Contracting Officer, deliver to the Government --

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated;

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government; and

(iii) The jigs, dies, fixtures, and other special tools and tooling acquired or manufactured for this contract, the cost of which the Contractor has been or will be reimbursed under this contract.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (c)(6) of this clause; provided, however, that the Contractor

(i) is not required to extend credit to any purchaser and

(ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer.

The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(d) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(e) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept the items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(f) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(g) Subject to paragraph (f) of this clause, the Contractor and the Contracting Officer may agree on the whole or any part of the amount to be paid (including an allowance for fee) because of the termination. The contract shall be amended, and the Contractor paid the agreed amount.

(h) If the Contractor and the Contracting Officer fail to agree in whole or in part on the amount of costs and/or fee to be paid because of the termination of work, the Contracting Officer shall determine, on the basis of information available, the amount, if any, due the Contractor, and shall pay that amount, which shall include the following:

(1) All costs reimbursable under this contract, not previously paid, for the performance of this contract before the effective date of the termination, and those costs that may continue for a reasonable time with the approval of or as directed by the Contracting Officer; however, the Contractor shall discontinue those costs as rapidly as practicable.

(2) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subparagraph (h)(1) of this clause.

(3) The reasonable costs of settlement of the work terminated, including --

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory. If the termination is for default, no amounts for the preparation of the Contractor's termination settlement proposal may be included.

(4) A portion of the fee payable under the contract, determined as follows:

(i) If the contract is terminated for the convenience of the Government, the settlement shall include a percentage of the fee equal to the percentage of completion of work contemplated under the contract, but excluding subcontract effort included in subcontractors' termination proposals, less previous payments for fee.

(ii) If the contract is terminated for default, the total fee payable shall be such proportionate part of the fee as the total number of articles (or amount of services) delivered to and accepted by the Government is to the total number of articles (or amount of services) of a like kind required by the contract.

(5) If the settlement includes only fee, it will be determined under subparagraph (h)(4) of this clause.

(i) The cost principles and procedures in Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (f), (h), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (f) and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under paragraph (f), (h) or (l) of this clause, the Government shall pay the Contractor --

(1) The amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken;
or

(2) The amount finally determined on an appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted --

(1) All unliquidated advance or other payments to the Contractor, under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of materials, supplies, or other things acquired by the Contractor or sold under this clause and not recovered by or credited to the Government.

(l) The Contractor and Contracting Officer must agree to any equitable adjustment in fee for the continued portion of the contract when there is a partial termination. The Contracting Officer shall amend the contract to reflect the agreement.

(m)

(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) The provisions of this clause relating to fee are inapplicable if this contract does not include a fee.

I.131 52.249-14 -- Excusable Delays (Apr 1984)

(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are

- (1) acts of God or of the public enemy,
- (2) acts of the Government in either its sovereign or contractual capacity,
- (3) fires,
- (4) floods,
- (5) epidemics,
- (6) quarantine restrictions,
- (7) strikes,
- (8) freight embargoes, and
- (9) unusually severe weather.

In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default, unless --

- (1) The subcontracted supplies or services were obtainable from other sources;
- (2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and
- (3) The Contractor failed to comply reasonably with this order.

(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract.

I.132 52.251-1 -- Government Supply Sources (Apr 2012)

The Contracting Officer may issue the Contractor an authorization to use Government supply sources in the performance of this contract. Title to all property acquired by the Contractor under such an authorization shall vest in the Government unless otherwise specified in the contract. The provisions of the clause at FAR 52.245-1, Government Property, apply to all property acquired under such authorization.

I.133 52.253-1 -- Computer Generated Forms (Jan 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

I.134 952.202-1 Definitions (Feb 2011)

As prescribed in 902.201, insert the clause at 48 CFR 52.202-1, Definitions, in all contracts. The following shall be added to the clause as paragraph (c):

(c) When a solicitation provision or contract clause uses a word or term that is defined in the Department of Energy Acquisition Regulation (DEAR) (48 CFR chapter 9), the word or term has the same meaning as the definition in 48 CFR 902.101 or the definition in the part, subpart, or section of 48 CFR chapter 9 where the provision or clause is prescribed in effect at the time the solicitation was issued, unless an exception in (a) applies.

I.135 952.203-70 Whistleblower Protection for Contractor Employees (DEC 2000)

(a) The Contractor shall comply with the requirements of "DOE Contractor Employee Protection Program" at 10 CFR part 708 for work performed on behalf of DOE directly related to activities at DOE-owned or -leased sites.

(b) The Contractor shall insert or have inserted the substance of this clause, including this paragraph (b), in subcontracts at all tiers, for subcontracts involving work performed on behalf of DOE directly related to activities at DOE-owned or leased sites.

I.136 952.204-2 Security Requirements (Aug. 2016)

(a) *Responsibility.* It is the Contractor's duty to protect all classified information, special nuclear material, and other DOE property. The Contractor shall, in accordance with DOE security regulations and requirements, be responsible for protecting all classified information and all classified matter (including documents, material and special nuclear material) which are in the Contractor's possession in connection with the performance of work under this contract against sabotage, espionage, loss or theft. Except as otherwise expressly provided in this contract, the Contractor shall, upon completion or termination of this contract, transmit to DOE any classified matter or special nuclear material in the possession of the Contractor or any person under the Contractor's control in connection with performance of this contract. If

retention by the Contractor of any classified matter is required after the completion or termination of the contract, the Contractor shall identify the items and classification levels and categories of matter proposed for retention, the reasons for the retention, and the proposed period of retention. If the retention is approved by the Contracting Officer, the security provisions of the contract shall continue to be applicable to the classified matter retained. Special nuclear material shall not be retained after the completion or termination of the contract.

(b) *Regulations.* The Contractor agrees to comply with all security regulations and contract requirements of DOE as incorporated into the contract.

(c) *Definition of classified information.* The term *Classified Information* means information that is classified as Restricted Data or Formerly Restricted Data under the Atomic Energy Act of 1954, or information determined to require protection against unauthorized disclosure under Executive Order 12958, *Classified National Security Information*, as amended, or prior executive orders, which is identified as *National Security Information*.

(d) *Definition of restricted data.* The term *Restricted Data* means all data concerning design, manufacture, or utilization of atomic weapons; production of special nuclear material; or use of special nuclear material in the production of energy, but excluding data declassified or removed from the Restricted Data category pursuant to 42 U.S.C. 2162 [Section 142, as amended, of the Atomic Energy Act of 1954].

(e) *Definition of formerly restricted data.* The term "*Formerly Restricted Data*" means information removed from the Restricted Data category based on a joint determination by DOE or its predecessor agencies and the Department of Defense that the information-(1) Relates primarily to the military utilization of atomic weapons; and (2) can be adequately protected as National Security Information. However, such information is subject to the same restrictions on transmission to other countries or regional defense organizations that apply to Restricted Data.

(f) *Definition of national security information.* The term "*National Security Information*" means information that has been determined, pursuant to Executive Order 12958, *Classified National Security Information*, as amended, or any predecessor order, to require protection against unauthorized disclosure, and that is marked to indicate its classified status when in documentary form.

(g) *Definition of special nuclear material.* The term "special nuclear material" means-(1) Plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which, pursuant to 42 U.S.C. 2071 [section 51 as amended, of the Atomic Energy Act of 1954] has been determined to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.

(h) *Access authorizations of personnel.* (1) The Contractor shall not permit any individual to have access to any classified information or special nuclear material, except in accordance with the Atomic Energy Act of 1954, and the DOE's regulations and contract requirements applicable to the particular level and category of classified information or particular category of special nuclear material to which access is required.

(2) The Contractor must conduct a thorough review, as defined at 48 CFR 904.401, of an uncleared applicant or uncleared employee, and must test the individual for illegal drugs, prior to selecting the individual for a position requiring a DOE access authorization.

(i) A review must-Verify an uncleared applicant's or uncleared employee's educational background, including any high school diploma obtained within the past five years, and degrees or diplomas granted by an institution of higher learning; contact listed employers for the last three years and listed personal references; conduct local law enforcement checks when such checks are not prohibited by state or local law or regulation and when the uncleared applicant or uncleared employee resides in the jurisdiction where the Contractor is located; and conduct a credit check and other checks as appropriate.

(ii) Contractor reviews are not required for an applicant for DOE access authorization who possesses a current access authorization from DOE or another Federal agency, or whose access authorization may be reapproved without a federal background investigation pursuant to Executive Order 12968, Access to Classified Information (August 4, 1995), Sections 3.3(c) and (d).

(iii) In collecting and using this information to make a determination as to whether it is appropriate to select an uncleared applicant or uncleared employee to a position requiring an access authorization, the Contractor must comply with all applicable laws, regulations, and Executive Orders, including those-(A) Governing the processing and privacy of an individual's information, such as the Fair Credit Reporting Act, Americans with Disabilities Act (ADA), and Health Insurance Portability and Accountability Act; and (B) prohibiting discrimination in employment, such as under the ADA, Title VII and the Age Discrimination in Employment Act, including with respect to pre- and post-offer of employment disability related questioning.

(iv) In addition to a review, each candidate for a DOE access authorization must be tested to demonstrate the absence of any illegal drug, as defined in 10 CFR 707.4. All positions requiring access authorizations are deemed *testing designated positions* in accordance with 10 CFR part 707. All employees possessing access authorizations are subject to applicant, random or for cause testing for use of illegal drugs. DOE will not process candidates for a DOE access authorization unless their tests confirm the absence from their system of any illegal drug.

(v) When an uncleared applicant or uncleared employee receives an offer of employment for a position that requires a DOE access authorization, the Contractor shall not place that individual in such a position prior to the individual's receipt of a DOE access authorization, unless an approval has been obtained from the head of the cognizant local security office. If the individual is hired and placed in the position prior to receiving an access authorization, the uncleared employee may not be afforded access to classified information or matter or special nuclear material (in categories requiring access authorization) until an access authorization has been granted.

(vi) The Contractor must maintain a record of information concerning each uncleared applicant or uncleared employee who is selected for a position requiring an access authorization. Upon request only, the following information will be furnished to the head of the cognizant local DOE Security Office:

(A) The date(s) each Review was conducted;

(B) Each entity that provided information concerning the individual;

(C) A certification that the review was conducted in accordance with all applicable laws, regulations, and Executive Orders, including those governing the processing and privacy of an individual's information collected during the review;

(D) A certification that all information collected during the review was reviewed and evaluated in accordance with the Contractor's personnel policies; and

(E) The results of the test for illegal drugs.

(i) *Criminal liability.* It is understood that disclosure of any classified information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to protect any classified information, special nuclear material, or other Government property that may come to the Contractor or any person under the Contractor's control in connection with work under this contract, may subject the Contractor, its agents, employees, or Subcontractors to criminal liability under the laws of the United States (see the Atomic Energy Act of 1954, 42 U.S.C. 2011 *et seq.*; 18 U.S.C. 793 and 794).

(j) *Foreign ownership, control, or influence.* (1) The Contractor shall immediately provide the cognizant security office written notice of any change in the extent and nature of foreign ownership, control or influence over the Contractor which would affect any answer to the questions presented in the Standard

Form (SF) 328, *Certificate Pertaining to Foreign Interests*, executed prior to award of this contract. The Contractor will submit the Foreign Ownership, Control or Influence (FOCI) information in the format directed by DOE. When completed the Contractor must print and sign one copy of the SF 328 and submit it to the Contracting Officer. In addition, any notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice, shall also be furnished concurrently to the Contracting Officer.

(2) If a Contractor has changes involving foreign ownership, control, or influence, DOE must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, DOE will consider proposals made by the Contractor to avoid or mitigate foreign influences.

(3) If the cognizant security office at any time determines that the Contractor is, or is potentially, subject to foreign ownership, control, or influence, the Contractor shall comply with such instructions as the Contracting Officer shall provide in writing to protect any classified information or special nuclear material.

(4) The Contracting Officer may terminate this contract for default either if the Contractor fails to meet obligations imposed by this clause or if the Contractor creates a foreign ownership, control, or influence situation in order to avoid performance or a termination for default. The Contracting Officer may terminate this contract for convenience if the Contractor becomes subject to foreign ownership, control, or influence and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the foreign ownership, control, or influence problem.

(k) *Employment announcements.* When placing announcements seeking applicants for positions requiring access authorizations, the Contractor shall include in the written vacancy announcement, a notification to prospective applicants that reviews, and tests for the absence of any illegal drug as defined in 10 CFR 707.4, will be conducted by the employer and a background investigation by the Federal government may be required to obtain an access authorization prior to employment, and that subsequent reinvestigations may be required. If the position is covered by the Counterintelligence Evaluation Program regulations at 10 CFR part 709, the announcement should also alert applicants that successful completion of a counterintelligence evaluation may include a counterintelligence-scope polygraph examination.

(l) *Flow down to subcontracts.* The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph, in all subcontracts under its contract that will require subcontractor employees to possess access authorizations. Additionally, the Contractor must require such subcontractors to have an existing DOD or DOE facility clearance or submit a completed SF 328, *Certificate Pertaining to Foreign Interests*, as required in 48 CFR 952.204-73, Facility Clearance, and obtain a foreign ownership, control and influence determination and facility clearance prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the Contracting Officer. For purposes of this clause, subcontractor means any subcontractor at any tier and the term "Contracting Officer" means the DOE Contracting Officer. When this clause is included in a subcontract, the term "Contractor" shall mean subcontractor and the term "contract" shall mean subcontract.

I.137 952.204-70 Classification/Declassification (SEP 1997)

In the performance of work under this contract, the Contractor or subcontractor shall comply with all provisions of the Department of Energy's regulations and mandatory DOE directives which apply to work involving the classification and declassification of information, documents, or material. In this section, "information" means facts, data, or knowledge itself; "document" means the physical medium on or in which information is recorded; and "material" means a product or substance which contains or reveals information, regardless of its physical form or characteristics. Classified information is "Restricted Data"

and “Formerly Restricted Data” (classified under the Atomic Energy Act of 1954, as amended) and “National Security Information” (classified under Executive Order 12958 or prior Executive Orders).

The original decision to classify or declassify information is considered an inherently Governmental function. For this reason, only Government personnel may serve as original classifiers, i.e., Federal Government Original Classifiers. Other personnel (Government or Contractor) may serve as derivative classifiers which involves making classification decisions based upon classification guidance which reflect decisions made by Federal Government Original Classifiers.

The Contractor or subcontractor shall ensure that any document or material that may contain classified information is reviewed by either a Federal Government or a Contractor Derivative Classifier in accordance with classification regulations including mandatory DOE directives and classification/declassification guidance furnished to the Contractor by the Department of Energy to determine whether it contains classified information prior to dissemination. For information which is not addressed in classification/declassification guidance, but whose sensitivity appears to warrant classification, the Contractor or subcontractor shall ensure that such information is reviewed by a Federal Government Original Classifier.

In addition, the Contractor or subcontractor shall ensure that existing classified documents (containing either Restricted Data or Formerly Restricted Data or National Security Information) which are in its possession or under its control are periodically reviewed by a Federal Government or Contractor Derivative Classifier in accordance with classification regulations, mandatory DOE directives and classification/declassification guidance furnished to the Contractor by the Department of Energy to determine if the documents are no longer appropriately classified. Priorities for declassification review of classified documents shall be based on the degree of public and researcher interest and the likelihood of declassification upon review. Documents which no longer contain classified information are to be declassified. Declassified documents then shall be reviewed to determine if they are publicly releasable. Documents which are declassified and determined to be publicly releasable are to be made available to the public in order to maximize the public's access to as much Government information as possible while minimizing security costs.

The Contractor or subcontractor shall insert this clause in any subcontract which involves or may involve access to classified information.

I.138 952.204-75 Public Affairs (DEC 2000)

(a) The Contractor must cooperate with the Department in releasing unclassified information to the public and news media regarding DOE policies, programs, and activities relating to its effort under the contract. The responsibilities under this clause must be accomplished through coordination with the Contracting Officer and appropriate DOE public affairs personnel in accordance with procedures defined by the Contracting Officer.

(b) The Contractor is responsible for the development, planning, and coordination of proactive approaches for the timely dissemination of unclassified information regarding DOE activities onsite and offsite, including, but not limited to, operations and programs. Proactive public affairs programs may utilize a variety of communication media, including public workshops, meetings or hearings, open houses, newsletters, press releases, conferences, audio/visual presentations, speeches, forums, tours, and other appropriate stakeholder interactions.

(c) The Contractor's internal procedures must ensure that all releases of information to the public and news media are coordinated through, and approved by, a management official at an appropriate level within the Contractor's organization.

(d) The Contractor must comply with DOE procedures for obtaining advance clearances on oral, written, and audio/visual informational material prepared for public dissemination or use.

(e) Unless prohibited by law, and in accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of communications or contacts with Members of Congress relating to the effort performed under the contract.

(f) In accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of activities or situations that may attract regional or national news media attention and of non-routine inquiries from national news media relating to the effort performed under the contract.

(g) In releases of information to the public and news media, the Contractor must fully and accurately identify the Contractor's relationship to the Department and fully and accurately credit the Department for its role in funding programs and projects resulting in scientific, technical, and other achievements.

I.139 952.204-77 Computer Security (AUG 2006)

(a) *Definitions.* (1) *Computer* means desktop computers, portable computers, computer networks (including the DOE Network and local area networks at or controlled by DOE organizations), network devices, automated information systems, and or other related computer equipment owned by, leased, or operated on behalf of the DOE.

(2) *Individual* means a DOE Contractor or subcontractor employee, or any other person who has been granted access to a DOE computer or to information on a DOE computer, and does not include a member of the public who sends an e-mail message to a DOE computer or who obtains information available to the public on DOE Web sites.

(b) *Access to DOE computers.* A Contractor shall not allow an individual to have access to information on a DOE computer unless-

(1) The individual has acknowledged in writing that the individual has no expectation of privacy in the use of a DOE computer; and

(2) The individual has consented in writing to permit access by an authorized investigative agency to any DOE computer used during the period of that individual's access to information on a DOE computer, and for a period of three years thereafter.

(c) *No expectation of privacy.* Notwithstanding any other provision of law (including any provision of law enacted by the Electronic Communications Privacy Act of 1986), no individual using a DOE computer shall have any expectation of privacy in the use of that computer.

(d) *Written records.* The Contractor is responsible for maintaining written records for itself and subcontractors demonstrating compliance with the provisions of paragraph (b) of this section. The Contractor agrees to provide access to these records to the DOE, or its authorized agents, upon request.

(e) *Subcontracts.* The Contractor shall insert this clause, including this paragraph (e), in subcontracts under this contract that may provide access to computers owned, leased or operated on behalf of the DOE.

I.140 952.208-70 Printing (APR 1984)

The Contractor shall not engage in, nor subcontract for, any printing (as that term is defined in Title I of the U.S. Government Printing and Binding Regulations in effect on the effective date of this contract) in connection with the performance of work under this contract. Provided, however, that performance of a requirement under this contract involving the duplication of less than 5,000 copies of a single unit, or no more than 25,000 units in the aggregate of multiple units, will not be deemed to be printing. A unit is

defined as one sheet, size 8½ by 11 inches one side only, one color. A requirement is defined as a single publication document.

(1) The term *printing* includes the following processes: composition, plate making, presswork, binding, microform publishing, or the end items produced by such processes.

(2) If fulfillment of the contract will necessitate reproduction in excess of the limits set forth above, the Contractor shall notify the Contracting Officer in writing and obtain the Contracting Officer's approval prior to acquiring on DOE's behalf production, acquisition, and dissemination of printed matter. Such printing must be obtained from the Government Printing Office (GPO), a contract source designated by GPO or a Joint Committee on Printing authorized federal printing plant.

(3) Printing services not obtained in compliance with this guidance will result in the cost of such printing being disallowed.

(4) The Contractor will include in each of his subcontracts hereunder a provision substantially the same as this clause including this paragraph (4).

I.141 952.215-70 Key Personnel (DEC 2000)

(a) The personnel listed below or elsewhere in this contract [Insert cross-reference, if applicable] are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must: (1) Notify the Contracting Officer reasonably in advance; (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and (3) obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

(b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

[See Section H]

I.142 952.223-75 Preservation of Individual Occupational Radiation Exposure Records (APR 1984)

Individual occupational radiation exposure records generated in the performance of work under this contract shall be generated and maintained by the contractor in accordance with 36 CFR Chapter XII, Subchapter B, "Records Management," the National Archives and Records Administration (NARA)-approved DOE Records Disposition Schedules, and shall be operated as a DOE Privacy Act system of records, in accordance with the Privacy Act.

I.143 952.223-78 Sustainable Acquisition Program (OCT 2010)

(a) Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy (DOE) is committed to managing its facilities in an environmentally preferable and sustainable manner that will promote the natural environment and protect the health and well being of its Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall provide its services in a manner that promotes the natural environment, reduces greenhouse gas emissions and protects the health and well being of Federal employees, contract service providers and visitors using the facility.

(b) Green purchasing or sustainable acquisition has several interacting initiatives. The Contractor must comply with initiatives that are current as of the contract award date. DOE may require compliance with revised initiatives from time to time. The Contractor may request an equitable adjustment to the terms of its contract using the procedures in the Changes clause of the contract. The initiatives important to these Orders are explained on the following Government or Industry Internet Sites:

(1) Recycled Content Products are described at <http://epa.gov/cpg>.

(2) Biobased Products are described at <http://www.biopreferred.gov/>.

(3) Energy efficient products are at <http://energystar.gov/products> for Energy Star products.

(4) Energy efficient products are at <http://www.femp.energy.gov/procurement> for FEMP designated products.

(5) Environmentally preferable and energy efficient electronics including desktop computers, laptops and monitors are at <http://www.epeat.net> the Electronic Products Environmental Assessment Tool (EPEAT) the Green Electronics Council site.

(6) Green house gas emission inventories are required, including Scope 3 emissions which include contractor emissions. These are discussed at Section 13 of Executive Order 13514 which can be found at <http://www.archives.gov/federal-register/executive-orders/disposition.html>.

(7) Non-Ozone Depleting Alternative Products are at <http://www.epa.gov/ozone/strathome.html>.

(8) Water efficient plumbing products are at <http://epa.gov/watersense>.

(c) The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, require the use of products that have biobased content, are energy efficient, or have recycled content. To the extent that the services provided by the Contractor require provision of any of the above types of products, the Contractor must provide the energy efficient and environmentally sustainable type of product unless that type of product-

(1) Is not available;

(2) Is not life cycle cost effective or does not exceed 110% of the price of alternative items if life cycle cost data is unavailable (EPEAT is an example of lifecycle costs that have been analyzed by DOE and found to be acceptable at the silver and gold level);

(3) Does not meet performance needs; or,

(4) Cannot be delivered in time to meet a critical need.

(d) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, (<http://www.epa.gov/greeningepa/practices/eo13423.htm>) and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (<http://www.archives.gov/federal-register/executive-orders/disposition.html>). The Contractor shall also consider the best practices within the DOE Acquisition Guide, Chapter 23, *Acquisition Considerations Regarding Federal Leadership in Environmental, Energy, and Economic Performance*. This guide includes information concerning recycled content products, biobased products, energy efficient products, water efficient products, alternative fuels and vehicles, non-ozone depleting substances and other environmentally preferable products and services. This guide is available on the Internet at: <http://management.energy.gov/documents/AcqGuide23pt0Rev1.pdf>.

(e) Contractors must establish and maintain a documented energy management program which includes requirements for energy and water efficient equipment, EnergyStar or WaterSense, as applicable and procedures for verification of purchases, following the criteria in DOE Order 430.2B, Departmental

Energy, Renewable Energy, and Transportation Management, Attachment 1, or its successor to the extent required elsewhere in the contract. This requirement should not be flowed down to subcontractors.

(f) In complying with the requirements of paragraph (c) of this clause, the Contractor(s) shall coordinate its activities with and submit required reports through the Environmental Sustainability Coordinator or equivalent position. Reporting under this paragraph and paragraphs (g) and (h) of this clause is only required if the contract or subcontract offers subcontracting opportunities for energy efficient and environmentally sustainable products or services exceeding \$100,000 in any contract year.

(g) The Contractor shall prepare and submit performance reports, if required, using prescribed DOE formats, at the end of the Federal fiscal year, on matters related to the acquisition of environmentally preferable and sustainable products and services. This is a material delivery under the contract. Failure to perform this requirement may be considered a failure that endangers performance of this contract and may result in termination for default.

(h) These provisions shall be flowed down only to first tier subcontracts exceeding the simplified acquisition threshold that support operation of the DOE facility and offer significant subcontracting opportunities for energy efficient or environmentally sustainable products or services. The Subcontractor, if subcontracting opportunities for sustainable and environmentally preferable products or services exceed the threshold in paragraph (f) of this clause, will comply with the procedures in paragraphs (c) through (f) of this clause regarding the collection of all data necessary to generate the reports required under paragraphs (c) through (f) of this clause, and submit the reports directly to the Prime Contractor's Environmental Sustainability Coordinator at the supported facility. The Subcontractor will advise the Contractor if it is unable to procure energy efficient and environmentally sustainable items and cite which of the reasons in paragraph (c) of this clause apply. The reports may be submitted at the conclusion of the subcontract term provided that the subcontract delivery term is not multi-year in nature. If the delivery term is multi-year, the Subcontractor shall report its accomplishments for each Federal fiscal year in a manner and at a time or times acceptable to both parties. Failure to comply with these reporting requirements may be considered a breach of contract with attendant consequences.

(i) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "Subcontractor."

I.144 952.226-71 Utilization of Energy Policy Act Target Entities (JUN 1996)

(a) *Definition.* Energy Policy Act target groups, as used in this provision means-

(1) An institution of higher education that meets the requirements of 34 CFR 600.4(a) and has a student enrollment that consists of at least 20 percent-

(i) Hispanic Americans, i.e., students whose origins are in Mexico, Puerto Rico, Cuba, or Central or South America, or any combination thereof, or

(ii) Native Americans, i.e., American Indians, Eskimos, Aleuts, and Native Hawaiians, or any combination thereof;

(2) Institutions of higher learning determined to be Historically Black Colleges and Universities by the Secretary of Education pursuant to 34 CFR 608.2; and

(3) Small business concerns, as defined under section 3 of the Small Business Act (15 U.S.C. 632), that are owned and controlled by individuals who are both socially and economically disadvantaged within the meaning of section 8(d) of the Small Business Act (15 U.S.C. 637(d)) or by a woman or women.

(b) *Obligation.* In addition to its obligations under the clause of this contract entitled Utilization of Small Business, Small Disadvantaged and Women-Owned Small Business Concerns, the contractor, in

performance of this contract, agrees to provide its best efforts to competitively award subcontracts to entities from among the Energy Policy Act target groups.

I.145 952.226-72 Energy Policy Act Subcontracting Goals and Reporting Requirements (JUN 1996)

(a) *Definition.* Energy Policy Act target groups, as used in this provision means-

(1) An institution of higher education that meets the requirements of 34 CFR 600.4(a), and has a student enrollment that consists of at least 20 percent-

(i) Hispanic Americans, i.e., students whose origins are in Mexico, Puerto Rico, Cuba, or Central or South America, or any combination thereof, or

(ii) Native Americans, i.e., American Indians, Eskimos, Aleuts, and Native Hawaiians, or any combination thereof;

(2) Institutions of higher learning determined to be Historically Black Colleges and Universities by the Secretary of Education pursuant to 34 CFR 608.2; and

(3) Small business concerns, as defined under section 3 of the Small Business Act (15 U.S.C. 632), that are owned and controlled by individuals who are both socially and economically disadvantaged within the meaning of section 8(d) of the Small Business Act (15 U.S.C. 637(d)) or by a woman or women.

(b) *Goals.* The Contractor, in performance of this contract, agrees to provide its best efforts to award subcontracts to the following classes of entities-

(1) Small business concerns controlled by socially and economically disadvantaged individuals or by women: * * * percent;

(2) Historically Black colleges and universities: * * * percent; and

(3) Colleges or universities having a student body in which more than 20 percent of the students are Hispanic Americans or Native Americans: * * * percent.

[* * * These goals are stated in a percentage reflecting the relationship of estimated award value of subcontracts to the value of this contract and appear elsewhere in this contract.]

(c) *Reporting requirements.* (1) The Contractor agrees to report, on an annual Federal Government fiscal year basis, its progress against the goals by providing the actual annual dollar value of subcontract payments for the preceding 12-month period, and the relationship of those payments to the incurred contract costs for the same period. Reports submitted pursuant to this clause must be received by the Contracting Officer (or designee) not later than 45 days after the end of the reporting period.

(2) If the contract includes reporting requirements under FAR 52.219-9, Small Business Subcontracting Plan, the Contractor's progress against the goals stated in paragraph (b) of this clause shall be included as an addendum to Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, as applicable, for the period that corresponds to the end of the Federal Government fiscal year.

I.146 952.226-74 Displaced Employee Hiring Preference (JUN 1997)

(a) *Definition.* *Eligible employee* means a current or former employee of a contractor or subcontractor employed at a Department of Energy Defense Nuclear Facility (1) whose position of employment has been, or will be, involuntarily terminated (except if terminated for cause), (2) who has also met the eligibility criteria contained in the Department of Energy guidance for contractor work force restructuring, as may be amended or supplemented from time to time, and (3) who is qualified for a particular job vacancy with the Department or one of its contractors with respect to work under its contract with the Department at the time the particular position is available.

(b) Consistent with Department of Energy guidance for contractor work force restructuring, as may be amended or supplemented from time to time, the Contractor agrees that it will provide a preference in hiring to an eligible employee to the extent practicable for work performed under this contract.

(c) The requirements of this clause shall be included in subcontracts at any tier (except for subcontracts for commercial items pursuant to 41 U.S.C. 403) expected to exceed \$500,000.

I.147 952.227-13 Patent Rights-Acquisition by the Government (SEP 1997)

(a) *Definitions.*

Invention, as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, *et seq.*).

Practical application, as used in this clause, means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

Subject invention, as used in this clause, means any invention of the Contractor conceived or first actually reduced to practice in the course of or under this contract.

Patent Counsel, as used in this clause, means the Department of Energy Patent Counsel assisting the procuring activity.

DOE patent waiver regulations, as used in this clause, means the Department of Energy patent waiver regulations in effect on the date of award of this contract. See 10 CFR part 784.

Agency licensing regulations and *applicable agency licensing regulations*, as used in this clause, mean the Department of Energy patent licensing regulations at 10 CFR part 781.

(b) *Allocations of principal rights-(1) Assignment to the Government.* The Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention, except to the extent that rights are retained by the Contractor under subparagraph (b)(2) and paragraph (d) of this clause.

(2) *Greater rights determinations.* (i) The Contractor, or an employee-inventor after consultation with the Contractor, may request greater rights than the nonexclusive license and the foreign patent rights provided in paragraph (d) of this clause on identified inventions in accordance with the DOE patent waiver regulations. A request for a determination of whether the Contractor or the employee-inventor is entitled to acquire such greater rights must be submitted to the Patent Counsel with a copy to the Contracting Officer at the time of the first disclosure of the invention pursuant to subparagraph (e)(2) of this clause, or not later than 8 months thereafter, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Contractor. Each determination of greater rights under this contract shall be subject to paragraph (c) of this clause, unless otherwise provided in the greater rights determination, and to the reservations and conditions deemed to be appropriate by the Secretary of Energy or designee.

(ii) Within two (2) months after the filing of a patent application, the Contractor shall provide the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and, promptly upon issuance of a patent, provide the patent number and issue date for any subject invention in any country for which the Contractor has been granted title or the right to file and prosecute on behalf of the United States by the Department of Energy.

(iii) Not less than thirty (30) days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the Patent Counsel of any decision not to continue prosecution of the application.

(iv) Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

(c) *Minimum rights acquired by the Government.* (1) With respect to each subject invention to which the Department of Energy grants the Contractor principal or exclusive rights, the Contractor agrees as follows:

(i) The Contractor hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced each subject invention throughout the world by or on behalf of the Government of the United States (including any Government agency).

(ii) The Contractor agrees that with respect to any subject invention in which DOE has granted it title, DOE has the right in accordance with the procedures in the DOE patent waiver regulations (10 CFR part 784) to require the Contractor, an assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if it determines that-

(A) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(B) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;

(C) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

(D) Such action is necessary because the agreement required by paragraph (i) of this clause has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(iii) The Contractor agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by that agency in accordance with subparagraph (c)(1)(ii) of this clause. To the extent data or information supplied under this section is considered by the Contractor, its licensee, or assignee to be privileged and confidential and is so marked, the Department of Energy agrees that, to the extent permitted by law, it will not disclose such information to persons outside the Government.

(iv) The Contractor agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.

(v) The Contractor agrees to provide for the Government's paid-up license pursuant to subparagraph (c)(1)(i) of this clause in any instrument transferring rights in a subject invention and to provide for the granting of licenses as required by subparagraph (c)(1)(ii) of this clause, and for the reporting of utilization information as required by subparagraph (c)(1)(iii) of this clause, whenever the instrument transfers principal or exclusive rights in a subject invention.

(2) Nothing contained in this paragraph (c) shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention.

(d) *Minimum rights to the Contractor.* (1) The Contractor is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government obtains title, unless the Contractor fails to disclose the subject invention within the times specified in subparagraph (e)(2) of this clause. The Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

(4) The Contractor may request the right to acquire patent rights to a subject invention in any foreign country where the Government has elected not to secure such rights, subject to the conditions in subparagraphs (d)(4)(i) through (d)(4)(vii) of this clause. Such request must be made in writing to the Patent Counsel as part of the disclosure required by subparagraph (e)(2) of this clause, with a copy to the DOE Contracting Officer. DOE approval, if given, will be based on a determination that this would best serve the national interest.

(i) The recipient of such rights, when specifically requested by DOE, and three years after issuance of a foreign patent disclosing the subject invention, shall furnish DOE a report stating:

(A) The commercial use that is being made, or is intended to be made, of said invention, and

(B) The steps taken to bring the invention to the point of practical application or to make the invention available for licensing.

(ii) The Government shall retain at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the Government (including any Government agency) and States and domestic municipal governments, unless the Secretary of Energy or designee determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments.

(iii) If noted elsewhere in this contract as a condition of the grant of an advance waiver of the Government's title to inventions under this contract, or, if no advance waiver was granted but a waiver of the Government's title to an identified invention is granted pursuant to subparagraph (b)(2) of this clause upon a determination by the Secretary of Energy that it is in the Government's best interest, this license shall include the right of the Government to sublicense foreign governments pursuant to any existing or future treaty or agreement with such foreign governments.

(iv) Subject to the rights granted in subparagraphs (d)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right to terminate the foreign patent rights granted in this subparagraph (d)(4) in whole or in part unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee that effective steps necessary to accomplish substantial utilization of the invention have been taken or within a reasonable time will be taken.

(v) Subject to the rights granted in subparagraphs (d)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right, commencing four years after foreign patent rights are accorded under this subparagraph (d)(4), to require the granting of a nonexclusive or partially exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, and in appropriate circumstances to terminate said foreign patent rights in whole or in part, following a hearing upon notice thereof to the public, upon a petition by an interested person justifying such hearing:

(A) If the Secretary of Energy or designee determines, upon review of such material as he deems relevant, and after the recipient of such rights or other interested person has had the opportunity to provide such relevant and material information as the Secretary or designee may require, that such foreign patent rights have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates; or

(B) Unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee at such hearing that the recipient has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.

(vi) If the contractor is to file a foreign patent application on a subject invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures for such period of time as specified by Patent Counsel, but in no event shall the Government or its employees be liable for any publication thereof.

(vii) Subject to the license specified in subparagraphs (d) (1), (2), and (3) of this clause, the contractor or inventor agrees to convey to the Government, upon request, the entire right, title, and interest in any foreign country in which the contractor or inventor fails to have a patent application filed in a timely manner or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the contractor or inventor shall, not less than 60 days before the expiration period for any action required by any patent office, notify the Patent Counsel of such failure or decision, and deliver to the Patent Counsel, the executed instruments necessary for the conveyance specified in this paragraph.

(e) *Invention identification, disclosures, and reports.* (1) The Contractor shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Contractor personnel responsible for patent matters within 6 months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

(2) The Contractor shall disclose each subject invention to the DOE Patent Counsel with a copy to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters or, if earlier, within 6 months after the Contractor becomes aware that a subject invention has been made, but in any event before any on sale, public use, or publication of such invention known to the Contractor. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Contractor shall promptly notify Patent Counsel of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor. The report should also include any request for a greater rights determination in accordance with subparagraph (b)(2) of this clause. When an invention is disclosed to DOE under this paragraph, it shall be deemed to have been made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908, unless the Contractor contends in writing at the time the invention is disclosed that it was not so made.

(3) The Contractor shall furnish the Contracting Officer the following:

(i) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing all subject inventions during that period, and including a statement that all subject inventions have been disclosed (or that there are not such inventions), and that such disclosure has been made in accordance with the procedures required by paragraph (e)(1) of this clause.

(ii) A final report, within 3 months after completion of the contracted work listing all subject inventions or containing a statement that there were no such inventions, and listing all subcontracts at any tier containing a patent right clause or containing a statement that there were no such subcontracts.

(4) The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (e)(2) of this clause.

(5) The Contractor agrees, subject to FAR 27.302(j), that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

(f) *Examination of records relating to inventions.* (1) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether-

(i) Any such inventions are subject inventions;

(ii) The Contractor has established and maintains the procedures required by subparagraphs (e) (1) and (4) of this clause;

(iii) The Contractor and its inventors have complied with the procedures.

(2) If the Contracting Officer learns of an unreported Contractor invention which the Contracting Officer believes may be a subject invention, the Contractor may be required to disclose the invention to DOE for a determination of ownership rights.

(3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

(g) *Withholding of payment* (This paragraph does not apply to subcontracts).

(1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of this contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the Contractor fails to-

(i) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each subject invention as required by this clause.

(ii) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph (e)(1) of this clause;

(iii) Disclose any subject invention pursuant to subparagraph (e)(2) of this clause;

(iv) Deliver acceptable interim reports pursuant to subparagraph (e)(3)(i) of this clause; or

(v) Provide the information regarding subcontracts pursuant to subparagraph (h)(4) of this clause.

(2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.

(3) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer all disclosures of subject inventions required by subparagraph (e)(2) of this clause, and acceptable final report pursuant to subparagraph (e)(3)(ii) of this clause, and the Patent Counsel has issued a patent clearance certification to the Contracting Officer.

(4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government rights.

(h) *Subcontracts*. (1) The contractor shall include the clause at 48 CFR 952.227-11 (suitably modified to identify the parties) in all subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work to be performed by a small business firm or domestic nonprofit organization, except where the work of the subcontract is subject to an Exceptional Circumstances Determination by DOE. In all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work, the contractor shall include this clause (suitably modified to identify the parties). The contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(2) In the event of a refusal by a prospective subcontractor to accept such a clause the Contractor-

(i) Shall promptly submit a written notice to the Contracting Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

(ii) Shall not proceed with such subcontract without the written authorization of the Contracting Officer.

(3) In the case of subcontracts at any tier, DOE, the subcontractor, and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this clause.

(4) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.

(5) The contractor shall identify all subject inventions of the subcontractor of which it acquires knowledge in the performance of this contract and shall notify the Patent Counsel, with a copy to the contracting officer, promptly upon identification of the inventions.

(i) *Preference United States industry.* Unless provided otherwise, no Contractor that receives title to any subject invention and no assignee of any such Contractor shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Government upon a showing by the Contractor or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) *Atomic energy.* (1) No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will obtain patent agreements to effectuate the provisions of subparagraph (e)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(k) *Background patents.* (1) *Background patent* means a domestic patent covering an invention or discovery which is not a subject invention and which is owned or controlled by the Contractor at any time through the completion of this contract:

(i) Which the contractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and

(ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture, or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this contract.

(2) The Contractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any background patent for purposes of practicing a subject of this contract by or for the Government in research, development, and demonstration work only.

(3) The Contractor also agrees that upon written application by DOE, it will grant to responsible parties, for purposes of practicing a subject of this contract, nonexclusive licenses under any background patent on terms that are reasonable under the circumstances. If, however, the Contractor believes that exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Contractor.

(4) Notwithstanding subparagraph (k)(3) of this clause, the contractor shall not be obligated to license any background patent if the Contractor demonstrates to the satisfaction of the Secretary of Energy or designee that:

(i) A competitive alternative to the subject matter covered by said background patent is commercially available or readily introducible from one or more other sources; or

(ii) The Contractor or its licensees are supplying the subject matter covered by said background patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

(l) *Publication.* It is recognized that during the course of the work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, patent approval for release of publication shall be secured from Patent Counsel prior to any such release or publication.

(m) *Forfeiture of rights in unreported subject inventions.* (1) The Contractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Contractor fails to report to Patent Counsel within six months after the time the Contractor:

(i) Files or causes to be filed a United States or foreign patent application thereon; or

(ii) Submits the final report required by subparagraph (e)(2)(ii) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in subparagraph (m)(1) of this clause, the Contractor:

(i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or

(ii) Contending that the invention is not a subject invention, the Contractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer; or

(iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Secretary of Energy or designee to be forfeited (such determination to be a final decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph (m) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to subject inventions.

I.148 952.231-71 Insurance-Litigation and Claims (JUL 2013)

(a) The contractor must comply with 10 CFR part 719, contractor Legal Management Requirements, if applicable.

(b)(1) Except as provided in paragraph (b)(2) of this clause, the contractor shall procure and maintain such bonds and insurance as required by law or approved in writing by the Contracting Officer.

(2) The contractor may, with the approval of the Contracting Officer, maintain a self-insurance program in accordance with FAR 28.308; provided that, with respect to workers' compensation, the contractor is qualified pursuant to statutory authority.

(3) All bonds and insurance required by this clause shall be in a form and amount and for those periods as the Contracting Officer may require or approve and with sureties and insurers approved by the Contracting Officer.

(c) The contractor agrees to submit for the Contracting Officer's approval, to the extent and in the manner required by the Contracting Officer, any other bonds and insurance that are maintained by the contractor in connection with the performance of this contract and for which the contractor seeks reimbursement. If

an insurance cost (whether a premium for commercial insurance or related to self-insurance) includes a portion covering costs made unallowable elsewhere in the contract, and the share of the cost for coverage for the unallowable cost is determinable, the portion of the cost that is otherwise an allowable cost under this contract is reimbursable to the extent determined by the Contracting Officer.

(d) Except as provided in paragraph (f) of this clause, or specifically disallowed elsewhere in this contract, the contractor shall be reimbursed-

(1) For that portion of the reasonable cost of bonds and insurance allocable to this contract required in accordance with contract terms or approved under this clause, and

(2) For liabilities (and reasonable expenses incidental to such liabilities, including litigation costs) to third persons not compensated by insurance without regard to the limitation of cost or limitation of funds clause of this contract.

(e) The Government's liability under paragraph (d) of this clause is subject to the availability of appropriated funds. Nothing in this contract shall be construed as implying that the Congress will, at a later date, appropriate funds sufficient to meet deficiencies.

(f)(1) Notwithstanding any other provision of this contract, the contractor shall not be reimbursed for liabilities to third parties, including contractor employees, and directly associated costs which may include but are not limited to litigation costs, counsel fees, judgment and settlements-

(i) Which are otherwise unallowable by law or the provisions of this contract, including the cost reimbursement limitations contained in 48 CFR part 970.31, as supplemented by 48 CFR part 931;

(ii) For which the contractor has failed to insure or to maintain insurance as required by law, this contract, or by the written direction of the Contracting Officer; or

(iii) Which were caused by contractor managerial personnel's-

(A) Willful misconduct;

(B) Lack of good faith; or

(C) Failure to exercise prudent business judgment, which means failure to act in the same manner as a prudent person in the conduct of competitive business; or, in the case of a non-profit educational institution, failure to act in the manner that a prudent person would under the circumstances prevailing at the time the decision to incur the cost is made.

(2) The term "contractor's managerial personnel" is defined in the Property clause in this contract.

(g)(1) All litigation costs, including counsel fees, judgments and settlements shall be segregated and accounted for by the contractor separately. If the Contracting Officer provisionally disallows such costs, then the contractor may not use funds advanced by DOE under the contract to finance the litigation.

(2) Punitive damages are not allowable unless the act or failure to act which gave rise to the liability resulted from compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer.

(3) The portion of the cost of insurance obtained by the contractor that is allocable to coverage of liabilities referred to in paragraph (f) of this clause is not allowable.

(h) The contractor may at its own expense and not as an allowable cost procure for its own protection insurance to compensate the contractor for any unallowable or non-reimbursable costs incurred in connection with contract performance.

I.149 952.242-70 Technical Direction (DEC 2000)

(a) Performance of the work under this contract shall be subject to the technical direction of the DOE Contracting Officer's Representative (COR). The term "technical direction" is defined to include, without limitation:

- (1) Providing direction to the Contractor that redirects contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details, or otherwise serve to accomplish the contractual Statement of Work.
- (2) Providing written information to the Contractor that assists in interpreting drawings, specifications, or technical portions of the work description.
- (3) Reviewing and, where required by the contract, approving, technical reports, drawings, specifications, and technical information to be delivered by the Contractor to the Government.

(b) The Contractor will receive a copy of the written COR designation from the Contracting Officer. It will specify the extent of the COR's authority to act on behalf of the Contracting Officer.

(c) Technical direction must be within the scope of work stated in the contract. The COR does not have the authority to, and may not, issue any technical direction that-

- (1) Constitutes an assignment of additional work outside the Statement of Work;
- (2) Constitutes a change as defined in the contract clause entitled "Changes;"
- (3) In any manner causes an increase or decrease in the total estimated contract cost, the fee (if any), or the time required for contract performance;
- (4) Changes any of the expressed terms, conditions or specifications of the contract; or
- (5) Interferes with the Contractor's right to perform the terms and conditions of the contract.

(d) All technical direction shall be issued in writing by the COR.

(e) The Contractor must proceed promptly with the performance of technical direction duly issued by the COR in the manner prescribed by this clause and within its authority under the provisions of this clause. If, in the opinion of the Contractor, any instruction or direction by the COR falls within one of the categories defined in (c)(1) through (c)(5) of this clause, the Contractor must not proceed and must notify the Contracting Officer in writing within five (5) working days after receipt of any such instruction or direction and must request the Contracting Officer to modify the contract accordingly. Upon receiving the notification from the Contractor, the Contracting Officer must-

- (1) Advise the Contractor in writing within thirty (30) days after receipt of the Contractor's letter that the technical direction is within the scope of the contract effort and does not constitute a change under the Changes clause of the contract;
- (2) Advise the Contractor in writing within a reasonable time that the Government will issue a written change order; or
- (3) Advise the Contractor in writing within a reasonable time not to proceed with the instruction or direction of the COR.

(f) A failure of the Contractor and Contracting Officer either to agree that the technical direction is within the scope of the contract or to agree upon the contract action to be taken with respect to the technical direction will be subject to the provisions of the clause entitled "Disputes."

I. 150 952.250-70 Nuclear Hazards Indemnity Agreement (AUG 2016)

(a) *Authority.* This clause is incorporated into this contract pursuant to the authority contained in subsection 170d. of the Atomic Energy Act of 1954, as amended (hereinafter called the Act.)

(b) *Definitions.* The definitions set out in the Act shall apply to this clause.

(c) *Financial protection.* Except as hereafter permitted or required in writing by DOE, the Contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in paragraph (d)(2) below. DOE may, however, at any time require in writing that the Contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the Contractor by DOE.

(d)(1) *Indemnification.* To the extent that the Contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the Contractor and other persons indemnified against (i) claims for public liability as described in subparagraph (d)(2) of this clause; and (ii) such legal costs of the Contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount set forth in section 170e.(1)(B) of the Act in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or \$500 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in subparagraph (d)(1) of this clause is public liability as defined in the Act which (i) arises out of or in connection with the activities under this contract, including transportation; and (ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e)(1) *Waiver of defenses.* In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the Contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which-

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the Contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the Contractor, on behalf of itself and other persons indemnified, agrees to waive-

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including, but not limited to-

(1) Negligence;

(2) Contributory negligence;

(3) Assumption of risk; or

(4) Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

(C) Any issue or defense based on any statute of limitations, if suit is instituted within 3 years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the

cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

(v) The term *extraordinary nuclear occurrence* means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR part 840.

(vi) For the purposes of that determination, *offsite* as that term is used in 10 CFR part 840 means away from “the contract location” which phrase means any DOE facility, installation, or site at which contractual activity under this contract is being carried on, and any contractor-owned or controlled facility, installation, or site at which the Contractor is engaged in the performance of contractual activity under this contract.

(3) The waivers set forth above-

(i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;

(ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;

(iii) Shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages;

(iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;

(v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefor are either payable or required to be provided under any workmen's compensation or occupational disease law;

(vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;

(vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

(f) *Notification and litigation of claims.* The Contractor shall give immediate written notice to DOE of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in paragraph (d)(2). Except as otherwise directed by DOE, the Contractor shall furnish promptly to DOE, copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. DOE shall have the right to, and may collaborate with, the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the Contractor or other person indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(g) *Continuity of DOE obligations.* The obligations of DOE under this clause shall not be affected by any failure on the part of the Contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the Contractor, or by the completion, termination or expiration of this contract.

(h) *Effect of other clauses.* The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including the clause entitled Contract Disputes, provided, however, that this clause shall be subject to the clauses entitled Covenant Against Contingent Fees, and Accounts, records, and inspection, and any provisions that are later added to this contract as required by applicable Federal law, including statutes, executive orders and regulations, to be included in Nuclear Hazards Indemnity Agreements.

(i) *Civil penalties.* The Contractor and its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to civil penalties, pursuant to 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders.

(j) *Criminal penalties.* Any individual director, officer, or employee of the Contractor or of its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to 223(c) of the Act, for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.

(k) *Inclusion in subcontracts.* The Contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is defined in the Act and further described in paragraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under section 170b. of the Act or NRC agreements of indemnification under section 170c. or k. of the Act for the activities under the subcontract.

I.151 952.247-70 Foreign Travel (JUN 2010)

Contractor foreign travel shall be conducted pursuant to the requirements contained in Department of Energy (DOE) Order 551.1C, Official Foreign Travel, or its successor in effect at the time of award.

I.152 952.251-70 Contractor Employee Travel Discounts (AUG 2009)

(a) The Contractor shall take advantage of travel discounts offered to Federal Contractor employee travelers by AMTRAK, hotels, motels, or car rental companies, when use of such discounts would result in lower overall trip costs and the discounted services are reasonably available. Vendors providing these services may require the Contractor employee to furnish them a letter of identification signed by the authorized Contracting Officer.

(b) *Contracted airlines.* Contractors are not eligible for GSA contract city pair fares.

(c) *Discount rail service.* AMTRAK voluntarily offers discounts to Federal travelers on official business and sometimes extends those discounts to Federal contractor employees.

(d) *Hotels/motels.* Many lodging providers extend their discount rates for Federal employees to Federal contractor employees.

(e) *Car rentals.* The Surface Deployment and Distribution Command (SDDC) of the Department of Defense negotiates rate agreements with car rental companies that are available to Federal travelers on official business. Some car rental companies extend those discounts to Federal contractor employees.

(f) *Obtaining travel discounts.* (1) To determine which vendors offer discounts to Government contractors, the Contractor may review commercial publications such as the Official Airline guides Official Traveler,

Innovata, or National Telecommunications. The Contractor may also obtain this information from GSA contract Travel Management Centers or the Department of Defense's Commercial Travel Offices.

(2) The vendor providing the service may require the Government contractor to furnish a letter signed by the Contracting Officer. The following illustrates a standard letter of identification.

OFFICIAL AGENCY LETTERHEAD

TO: Participating Vendor

SUBJECT: OFFICIAL TRAVEL OF GOVERNMENT CONTRACTOR

(FULL NAME OF TRAVELER), the bearer of this letter is an employee of (COMPANY NAME) which has a contract with this agency under Government contract (CONTRACT NUMBER). During the period of the contract (GIVE DATES), AND WITH THE APPROVAL OF THE CONTRACT VENDOR, the employee is eligible and authorized to use available travel discount rates in accordance with Government contracts and/or agreements. Government Contract City Pair fares are not available to Contractors.

SIGNATURE, Title and telephone number of Contracting Officer

I.153 970.5204-1 Counterintelligence (DEC 2010)

(a) The Contractor shall take all reasonable precautions in the work under this contract to protect DOE programs, facilities, technology, personnel, unclassified sensitive information and classified matter from foreign intelligence threats and activities conducted for governmental or industrial purposes, in accordance with DOE Order 475.1, Counterintelligence Program, or its successor; Executive Order 12333, U.S. Intelligence Activities; and other pertinent national and Departmental Counterintelligence requirements.

(b) The Contractor shall appoint a qualified employee(s) to function as the Contractor Counterintelligence Officer. The Contractor Counterintelligence Officer will be responsible for conducting defensive Counterintelligence briefings and debriefings of employees traveling to foreign countries or interacting with foreign nationals; providing thoroughly documented written reports relative to targeting, suspicious activity and other matters of Counterintelligence interest; immediately reporting targeting, suspicious activity and other Counterintelligence concerns to the DOE Headquarters Counterintelligence Division; and providing assistance to other elements of the U.S. Intelligence Community as stated in the aforementioned Executive Order, the DOE Counterintelligence Order, and other pertinent national and Departmental Counterintelligence requirements.

I.154 970.5227-1 Rights in Data-Facilities (DEC 2000)

(a) *Definitions.* (1) *Computer data bases*, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

(2) *Computer software*, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

(3) *Data*, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term "data" does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.

(4) *Limited rights data*, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of subparagraph (e) of this clause.

(5) *Restricted computer software*, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of paragraph (f) of this clause.

(6) *Technical data*, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

(7) *Unlimited rights*, as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

(b) *Allocation of Rights*. (1) The Government shall have:

(i) Ownership of all technical data and computer software first produced in the performance of this Contract;

(ii) Unlimited rights in technical data and computer software specifically used in the performance of this Contract, except as provided herein regarding copyright, limited rights data, or restricted computer software, or except for other data specifically protected by statute for a period of time or, where, approved by DOE, appropriate instances of the DOE Strategic Partnership Projects Program;

(iii) The right to inspect technical data and computer software first produced or specifically used in the performance of this Contract at all reasonable times. The Contractor shall make available all necessary facilities to allow DOE personnel to perform such inspection;

(iv) The right to have all technical data and computer software first produced or specifically used in the performance of this Contract delivered to the Government or otherwise disposed of by the Contractor, either as the contracting officer may from time to time direct during the progress of the work or in any event as the contracting officer shall direct upon completion or termination of this Contract. The Contractor agrees to leave a copy of such data at the facility or plant to which such data relate, and to make available for access or to deliver to the Government such data upon request by the contracting officer. If such data are limited rights data or restricted computer software, the rights of the Government in such data shall be governed solely by the provisions of paragraph (e) of this clause ("Rights in Limited Rights Data") or paragraph (f) of this clause ("Rights in Restricted Computer Software"); and

(v) The right to remove, cancel, correct, or ignore any markings not authorized by the terms of this Contract on any data furnished hereunder if, in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or fails to substantiate the propriety of the markings. In either case DOE will notify the Contractor of the action taken.

(2) The Contractor shall have:

(i) The right to withhold limited rights data and restricted computer software unless otherwise provided in accordance with the provisions of this clause; and

(ii) The right to use for its private purposes, subject to patent, security or other provisions of this Contract, data it first produces in the performance of this Contract, except for data in DOE's Uranium Enrichment

Technology, including diffusion, centrifuge, and atomic vapor laser isotope separation, provided the data requirements of this Contract have been met as of the date of the private use of such data.

(3) The Contractor agrees that for limited rights data or restricted computer software or other technical, business or financial data in the form of recorded information which it receives from, or is given access to by, DOE or a third party, including a DOE Contractor or subcontractor, and for technical data or computer software it first produces under this Contract which is authorized to be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend contained thereon.

(c) *Copyrighted Material.* (1) The Contractor shall not, without prior written authorization of the Patent Counsel, assert copyright in any technical data or computer software first produced in the performance of this contract. To the extent such authorization is granted, the Government reserves for itself and others acting on its behalf, a nonexclusive, paid-up, irrevocable, world-wide license for Governmental purposes to publish, distribute, translate, duplicate, exhibit, and perform any such data copyrighted by the Contractor.

(2) The Contractor agrees not to include in the technical data or computer software delivered under the contract any material copyrighted by the Contractor and not to knowingly include any material copyrighted by others without first granting or obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph (c)(1) of this clause. If the Contractor believes that such copyrighted material for which the license cannot be obtained must be included in the technical data or computer software to be delivered, rather than merely incorporated therein by reference, the Contractor shall obtain the written authorization of the contracting officer to include such material in the technical data or computer software prior to its delivery.

(d) *Subcontracting.* (1) Unless otherwise directed by the contracting officer, the Contractor agrees to use in subcontracts in which technical data or computer software is expected to be produced or in subcontracts for supplies that contain a requirement for production or delivery of data in accordance with the policy and procedures of 48 CFR Subpart 27.4 as supplemented by 48 CFR 927.401 through 927.409, the clause entitled, "Rights in Data-General" at 48 CFR 52.227-14 modified in accordance with 927.409(a) and including Alternate V. Alternates II through IV of that clause may be included as appropriate with the prior approval of DOE Patent Counsel, and the Contractor shall not acquire rights in a subcontractor's limited rights data or restricted computer software, except through the use of Alternates II or III, respectively, without the prior approval of DOE Patent Counsel. The clause at 48 CFR 52.227-16, Additional Data Requirements, shall be included in subcontracts in accordance with DEAR 927.409(h). The contractor shall use instead the Rights in Data-Facilities clause at 48 CFR 970.5227-1 in subcontracts, including subcontracts for related support services, involving the design or operation of any plants or facilities or specially designed equipment for such plants or facilities that are managed or operated under its contract with DOE.

(2) It is the responsibility of the Contractor to obtain from its subcontractors technical data and computer software and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:

(i) Promptly submit written notice to the contracting officer setting forth reasons for the subcontractor's refusal and other pertinent information which may expedite disposition of the matter, and

(ii) Not proceed with the subcontract without the written authorization of the contracting officer.

(3) Neither the Contractor nor higher-tier subcontractors shall use their power to award subcontracts as economic leverage to acquire rights in a subcontractor's limited rights data or restricted computer software for their private use.

(e) *Rights in Limited Rights Data.* Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license by or for the Government, in any limited rights data of the Contractor specifically used in the performance of this Contract, provided, however, that to the extent that any limited rights data when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Limited Rights Notice" set forth. All such limited rights data shall be marked with the following "Limited Rights Notice":

Limited Rights Notice

These data contain "limited rights data," furnished under Contract No. _____ with the United States Department of Energy which may be duplicated and used by the Government with the express limitations that the "limited rights data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor, except that further disclosure or use may be made solely for the following purposes:

- (a) Use (except for manufacture) by support services contractors within the scope of their contracts;
- (b) This "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
- (c) This "limited rights data" may be disclosed to other contractors participating in the Government's program of which this Contract is a part for information or use (except for manufacture) in connection with the work performed under their contracts and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
- (d) This "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and
- (e) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government. This Notice shall be marked on any reproduction of this data in whole or in part.

(End of notice)

(f) *Rights in restricted computer software.* (1) Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up, license by or for the Government, in any restricted computer software of the Contractor specifically used in the performance of this Contract, provided, however, that to the extent that any restricted computer software when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Restricted Rights Notice" set forth below. All such restricted computer software shall be marked with the following "Restricted Rights Notice":

Restricted Rights Notice-Long Form

- (a) This computer software is submitted with restricted rights under Department of Energy Contract No. _____. It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this notice.
- (b) This computer software may be:
 - (1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

(2) Used, copied for use, in a backup or replacement computer if any computer for which it was acquired is inoperative or is replaced;

(3) Reproduced for safekeeping (archives) or backup purposes;

(4) Modified, adapted, or combined with other computer software, provided that only the portions of the derivative software consisting of the restricted computer software are to be made subject to the same restricted rights; and

(5) Disclosed to and reproduced for use by contractors under a service contract (of the type defined in 48 CFR 37.101) in accordance with subparagraphs (b)(1) through (4) of this Notice, provided the Government makes such disclosure or reproduction subject to these restricted rights.

(c) Notwithstanding the foregoing, if this computer software has been published under copyright, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in the restricted rights notice above.

(d) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of notice)

(2) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used.

Restricted Rights Notice-Short Form

Use, reproduction, or disclosure is subject to restrictions set forth in the Long Form Notice of DOE Contract No. _____ with (name of Contractor).

(End of notice)

(3) If the software is embedded, or if it is commercially impractical to mark it with human readable text, then the symbol R and the clause date (mo/yr), in brackets or a box, a [R-mo/yr], may be used. This will be read to mean restricted computer software, subject to the rights of the Government as described in the Long Form Notice, in effect as of the date indicated next to the symbol. The symbol shall not be used to mark human readable material. In the event this Contract contains any variation to the rights in the Long Form Notice, then the contract number must also be cited.

(4) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, the software will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions and with unlimited rights, unless the Contractor includes the following statement with such copyright notice "Unpublished-rights reserved under the Copyright Laws of the United States."

(g) *Relationship to patents.* Nothing contained in this clause creates or is intended to imply a license to the Government in any patent or is intended to be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.

Section J - List of Documents, Exhibits and Other Attachments

DOE-J-1001 List of Attachments

The following attachments constitute part of this contract:

Attachment	Description
1	Compliance Documents
2	Contractor-Furnished Equipment
3	Wage Rate Determinations
4	Government-Furnished Property
5	Reporting Requirements

SECTION J - ATTACHMENT 1
COMPLIANCE DOCUMENTS

List A - Laws, Regulations, and DOE Directives

DOE is providing a list of laws and regulations (List A) applicable to work performed under this contract. Unless relief has been granted in writing by the appropriate regulatory agency, the Contractor shall comply with all applicable Federal and State Laws, Statutes, Codes, Rules, Regulations, and Orders; Executive Orders; Consensus Standards; and agreement documents applicable to work performed under this contract. The federal laws and regulations listed in the table below contain requirements normally relevant to the Contractor scope of work. These laws and regulations, and others, apply regardless whether they are explicitly stated in the Contract. In addition, laws and regulations typically apply to all persons or organizations such as subcontractors, suppliers, and federal employees.

Omission of any such applicable law or regulation in from List A does not affect the obligation of the Contractor to comply with such law or regulation. The Contractor must be aware of changes in the Code of Federal Regulations (CFR), Federal Acquisition Regulations (FAR), the United States Code (USC), Public Laws (PL) or other regulatory entities that have applicability to the Department of Energy and that impact the work scope. The Contractor shall notify the DOE Contracting Officer of any changes, and DOE will make a determination regarding modification to the contract.

10 CFR 719	Contractor Legal Management Requirements
36 CFR Chapter XII	National Archives and Records Administration
41 CFR 109	Department of Energy Property Management Regulations

List B - Applicable DOE Directives and Compliance Documents

The Contractor shall comply with the conditions and requirements of the NRC Nuclear Materials License SNM-7003 and applicable regulations

The Contracting Officer may, from time to time and at any time, revise List B by unilateral modification to the contract to add, modify, or delete specific requirements. Prior to revising List B, the Contracting Officer shall notify the Contractor in writing of the Department's intent to revise List B and provide the Contractor with the opportunity to assess the effect of the Contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule; and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract or NRC License. Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise List B and so advise the Contractor not later than 30 days prior to the effective date of the revision of List B. The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision of List B pursuant to the clause of this contract entitled, "Changes."

The Contractor is responsible for flowing down the requirements of these requirements to subcontracts at any tier to the extent necessary to ensure the Contractor's compliance with the requirements.

DOE Directives included in the *Access Permit 11-04:AC Operating*, are incorporated by reference into the Contract.

Directive	Title
DOE O 142.3A	Unclassified Foreign Visits and Assignments Program
DOE O 206.1	DOE Privacy Program
DOE N 206.4	Personal Identity Verification
DOE O 210.2A	DOE Corporate Operating Experience Program
DOE O 221.2A	Cooperation with the Office of Inspector General
DOE O 243.1B, Admin Change 1	Records Management Program
DOE O 442.1A	Department of Energy Employee Concerns Program
DOE O 442.2	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
DOE O 451.1B, Admin Change 3	National Environmental Policy Act Compliance Program
DOE O 460.1D	Packaging and Transportation Safety
DOE Order 460.2A	Departmental Materials Transportation and Packaging Management
DOE-STD-1186-2004	Specific Administrative Controls

SECTION J - ATTACHMENT 2
Contractor-furnished property

To Be Added

SECTION J - ATTACHMENT 3

Wage Rate Determinations

WD 15-4643 (Rev.-10) was first posted on www.wdol.gov on 01/01/2019

REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor | WAGE AND HOUR DIVISION

| WASHINGTON D.C. 20210

| Wage Determination No.: 2015-4643

Daniel W. Simms Division of | Revision No.: 10
Director Wage Determinations | Date Of Revision: 12/26/2018

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for
calendar year 2019 applies to all contracts subject to the Service Contract
Act for which the contract is awarded (and any solicitation was issued) on or
after January 1, 2015. If this contract is covered by the EO, the contractor
must pay all workers in any classification listed on this wage determination
at least \$10.60 per hour (or the applicable wage rate listed on this wage
determination, if it is higher) for all hours spent performing on the contract
in calendar year 2019. The EO minimum wage rate will be adjusted annually.
Additional information on contractor requirements and worker protections under
the EO is available at www.dol.gov/whd/govcontracts.

State: Tennessee

Area: Tennessee Counties of Anderson, Blount, Campbell, Grainger, Knox, Loudon,
Morgan, Roane, Union

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE FOOTNOTE RATE

01000 - Administrative Support And Clerical Occupations

01011 - Accounting Clerk I 13.97

01012 - Accounting Clerk II 15.68

01013 - Accounting Clerk III 17.54

01020 - Administrative Assistant 23.47

01035 - Court Reporter 18.10

01041 - Customer Service Representative I 11.55

01042 - Customer Service Representative II 12.99

01043 - Customer Service Representative III 14.17

01051 - Data Entry Operator I 12.67

01052 - Data Entry Operator II 13.82

01060 - Dispatcher, Motor Vehicle 17.17

01070 - Document Preparation Clerk 13.97

01090 - Duplicating Machine Operator 13.97

01111 - General Clerk I 11.97

01112 - General Clerk II 13.06

01113 - General Clerk III 14.66

01120 - Housing Referral Assistant 19.92
01141 - Messenger Courier 12.88
01191 - Order Clerk I 14.36
01192 - Order Clerk II 16.52
01261 - Personnel Assistant (Employment) I 15.13
01262 - Personnel Assistant (Employment) II 16.92
01263 - Personnel Assistant (Employment) III 18.87
01270 - Production Control Clerk 24.30
01290 - Rental Clerk 13.05
01300 - Scheduler, Maintenance 16.31
01311 - Secretary I 16.31
01312 - Secretary II 18.10
01313 - Secretary III 19.92
01320 - Service Order Dispatcher 17.05
01410 - Supply Technician 23.47
01420 - Survey Worker 17.19
01460 - Switchboard Operator/Receptionist 12.97
01531 - Travel Clerk I 14.28
01532 - Travel Clerk II 15.20
01533 - Travel Clerk III 16.37
01611 - Word Processor I 13.56
01612 - Word Processor II 15.22
01613 - Word Processor III 17.03
05000 - Automotive Service Occupations
05005 - Automobile Body Repairer, Fiberglass 19.72
05010 - Automotive Electrician 16.26
05040 - Automotive Glass Installer 15.46
05070 - Automotive Worker 15.46
05110 - Mobile Equipment Servicer 13.68
05130 - Motor Equipment Metal Mechanic 17.13
05160 - Motor Equipment Metal Worker 15.46
05190 - Motor Vehicle Mechanic 17.13
05220 - Motor Vehicle Mechanic Helper 13.06
05250 - Motor Vehicle Upholstery Worker 14.51
05280 - Motor Vehicle Wrecker 15.46
05310 - Painter, Automotive 18.18
05340 - Radiator Repair Specialist 15.46
05370 - Tire Repairer 14.67
05400 - Transmission Repair Specialist 17.13
07000 - Food Preparation And Service Occupations
07010 - Baker 12.00
07041 - Cook I 11.36
07042 - Cook II 12.84
07070 - Dishwasher 9.00
07130 - Food Service Worker 9.61
07210 - Meat Cutter 14.13
07260 - Waiter/Waitress 8.86
09000 - Furniture Maintenance And Repair Occupations
09010 - Electrostatic Spray Painter 17.03
09040 - Furniture Handler 11.85
09080 - Furniture Refinisher 17.03
09090 - Furniture Refinisher Helper 13.76
09110 - Furniture Repairer, Minor 15.32
09130 - Upholsterer 17.03
11000 - General Services And Support Occupations
11030 - Cleaner, Vehicles 10.48
11060 - Elevator Operator 11.25
11090 - Gardener 15.74
11122 - Housekeeping Aide 11.25

11150 - Janitor 11.25
11210 - Laborer, Grounds Maintenance 12.47
11240 - Maid or Houseman 9.10
11260 - Pruner 11.30
11270 - Tractor Operator 14.75
11330 - Trail Maintenance Worker 12.47
11360 - Window Cleaner 12.03
12000 - Health Occupations
12010 - Ambulance Driver 14.54
12011 - Breath Alcohol Technician 16.48
12012 - Certified Occupational Therapist Assistant 28.33
12015 - Certified Physical Therapist Assistant 25.92
12020 - Dental Assistant 18.58
12025 - Dental Hygienist 36.27
12030 - EKG Technician 24.08
12035 - Electroneurodiagnostic Technologist 24.08
12040 - Emergency Medical Technician 14.54
12071 - Licensed Practical Nurse I 15.62
12072 - Licensed Practical Nurse II 17.47
12073 - Licensed Practical Nurse III 19.47
12100 - Medical Assistant 14.77
12130 - Medical Laboratory Technician 16.69
12160 - Medical Record Clerk 15.35
12190 - Medical Record Technician 17.19
12195 - Medical Transcriptionist 15.79
12210 - Nuclear Medicine Technologist 30.63
12221 - Nursing Assistant I 11.51
12222 - Nursing Assistant II 12.95
12223 - Nursing Assistant III 14.13
12224 - Nursing Assistant IV 15.86
12235 - Optical Dispenser 17.66
12236 - Optical Technician 14.46
12250 - Pharmacy Technician 16.23
12280 - Phlebotomist 14.69
12305 - Radiologic Technologist 23.63
12311 - Registered Nurse I 22.82
12312 - Registered Nurse II 27.91
12313 - Registered Nurse II, Specialist 27.91
12314 - Registered Nurse III 31.59
12315 - Registered Nurse III, Anesthetist 31.59
12316 - Registered Nurse IV 39.18
12317 - Scheduler (Drug and Alcohol Testing) 20.36
12320 - Substance Abuse Treatment Counselor 18.59
13000 - Information And Arts Occupations
13011 - Exhibits Specialist I 17.69
13012 - Exhibits Specialist II 21.90
13013 - Exhibits Specialist III 26.79
13041 - Illustrator I 17.69
13042 - Illustrator II 21.90
13043 - Illustrator III 26.79
13047 - Librarian 24.26
13050 - Library Aide/Clerk 13.06
13054 - Library Information Technology Systems Administrator 21.90
13058 - Library Technician 14.96
13061 - Media Specialist I 15.60
13062 - Media Specialist II 17.45
13063 - Media Specialist III 19.45
13071 - Photographer I 15.35

13072 - Photographer II 17.17
13073 - Photographer III 21.27
13074 - Photographer IV 26.03
13075 - Photographer V 31.48
13090 - Technical Order Library Clerk 16.40
13110 - Video Teleconference Technician 20.03
14000 - Information Technology Occupations
14041 - Computer Operator I 15.77
14042 - Computer Operator II 17.64
14043 - Computer Operator III 19.67
14044 - Computer Operator IV 21.86
14045 - Computer Operator V 24.20
14071 - Computer Programmer I (see 1) 22.54
14072 - Computer Programmer II (see 1) 25.40
14073 - Computer Programmer III (see 1)
14074 - Computer Programmer IV (see 1)
14101 - Computer Systems Analyst I (see 1)
14102 - Computer Systems Analyst II (see 1)
14103 - Computer Systems Analyst III (see 1)
14150 - Peripheral Equipment Operator 15.77
14160 - Personal Computer Support Technician 21.86
14170 - System Support Specialist 26.75
15000 - Instructional Occupations
15010 - Aircrew Training Devices Instructor (Non-Rated) 28.52
15020 - Aircrew Training Devices Instructor (Rated) 34.53
15030 - Air Crew Training Devices Instructor (Pilot) 38.44
15050 - Computer Based Training Specialist / Instructor 28.52
15060 - Educational Technologist 29.04
15070 - Flight Instructor (Pilot) 38.44
15080 - Graphic Artist 22.66
15085 - Maintenance Test Pilot, Fixed, Jet/Prop 38.44
15086 - Maintenance Test Pilot, Rotary Wing 38.44
15088 - Non-Maintenance Test/Co-Pilot 38.44
15090 - Technical Instructor 21.69
15095 - Technical Instructor/Course Developer 26.53
15110 - Test Proctor 17.51
15120 - Tutor 17.51
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations
16010 - Assembler 10.00
16030 - Counter Attendant 10.00
16040 - Dry Cleaner 12.85
16070 - Finisher, Flatwork, Machine 10.00
16090 - Presser, Hand 10.00
16110 - Presser, Machine, Drycleaning 10.00
16130 - Presser, Machine, Shirts 10.00
16160 - Presser, Machine, Wearing Apparel, Laundry 10.00
16190 - Sewing Machine Operator 13.75
16220 - Tailor 14.65
16250 - Washer, Machine 11.04
19000 - Machine Tool Operation And Repair Occupations
19010 - Machine-Tool Operator (Tool Room) 20.01
19040 - Tool And Die Maker 23.90
21000 - Materials Handling And Packing Occupations
21020 - Forklift Operator 14.15
21030 - Material Coordinator 24.30
21040 - Material Expediter 24.30
21050 - Material Handling Laborer 12.62
21071 - Order Filler 11.78
21080 - Production Line Worker (Food Processing) 14.15

21110 - Shipping Packer 13.39
21130 - Shipping/Receiving Clerk 13.39
21140 - Store Worker I 12.65
21150 - Stock Clerk 17.12
21210 - Tools And Parts Attendant 14.15
21410 - Warehouse Specialist 14.15
23000 - Mechanics And Maintenance And Repair Occupations
23010 - Aerospace Structural Welder 25.29
23019 - Aircraft Logs and Records Technician 20.45
23021 - Aircraft Mechanic I 24.12
23022 - Aircraft Mechanic II 25.29
23023 - Aircraft Mechanic III 26.37
23040 - Aircraft Mechanic Helper 18.06
23050 - Aircraft, Painter 22.90
23060 - Aircraft Servicer 20.45
23070 - Aircraft Survival Flight Equipment Technician 22.90
23080 - Aircraft Worker 21.78
23091 - Aircrew Life Support Equipment (ALSE) Mechanic 21.78 I
23092 - Aircrew Life Support Equipment (ALSE) Mechanic 24.12 II
23110 - Appliance Mechanic 19.18
23120 - Bicycle Repairer 17.01
23125 - Cable Splicer 29.52
23130 - Carpenter, Maintenance 17.32
23140 - Carpet Layer 20.98
23160 - Electrician, Maintenance 22.58
23181 - Electronics Technician Maintenance I 23.10
23182 - Electronics Technician Maintenance II 24.29
23183 - Electronics Technician Maintenance III 25.60
23260 - Fabric Worker 19.69
23290 - Fire Alarm System Mechanic 21.78
23310 - Fire Extinguisher Repairer 18.57
23311 - Fuel Distribution System Mechanic 25.61
23312 - Fuel Distribution System Operator 20.45
23370 - General Maintenance Worker 17.68
23380 - Ground Support Equipment Mechanic 24.12
23381 - Ground Support Equipment Servicer 20.45
23382 - Ground Support Equipment Worker 21.78
23391 - Gunsmith I 18.57
23392 - Gunsmith II 20.98
23393 - Gunsmith III 23.25
23410 - Heating, Ventilation And Air-Conditioning 20.40
Mechanic
23411 - Heating, Ventilation And Air Conditioning 21.47
Mechanic (Research Facility)
23430 - Heavy Equipment Mechanic 23.08
23440 - Heavy Equipment Operator 18.30
23460 - Instrument Mechanic 24.83
23465 - Laboratory/Shelter Mechanic 22.07
23470 - Laborer 12.59
23510 - Locksmith 22.07
23530 - Machinery Maintenance Mechanic 24.05
23550 - Machinist, Maintenance 22.16
23580 - Maintenance Trades Helper 13.60
23591 - Metrology Technician I 24.83
23592 - Metrology Technician II 26.13
23593 - Metrology Technician III 27.37
23640 - Millwright 21.30
23710 - Office Appliance Repairer 18.25
23760 - Painter, Maintenance 17.03

23790 - Pipefitter, Maintenance 21.31
23810 - Plumber, Maintenance 20.22
23820 - Pneudraulic Systems Mechanic 23.25
23850 - Rigger 21.92
23870 - Scale Mechanic 20.98
23890 - Sheet-Metal Worker, Maintenance 21.46
23910 - Small Engine Mechanic 16.19
23931 - Telecommunications Mechanic I 24.51
23932 - Telecommunications Mechanic II 25.71
23950 - Telephone Lineman 24.21
23960 - Welder, Combination, Maintenance 18.20
23965 - Well Driller 23.25
23970 - Woodcraft Worker 23.25
23980 - Woodworker 18.57
24000 - Personal Needs Occupations
24550 - Case Manager 14.30
24570 - Child Care Attendant 9.61
24580 - Child Care Center Clerk 11.97
24610 - Chore Aide 10.00
24620 - Family Readiness And Support Services 14.30
Coordinator
24630 - Homemaker 14.87
25000 - Plant And System Operations Occupations
25010 - Boiler Tender 25.65
25040 - Sewage Plant Operator 21.24
25070 - Stationary Engineer 25.65
25190 - Ventilation Equipment Tender 18.46
25210 - Water Treatment Plant Operator 21.24
27000 - Protective Service Occupations
27004 - Alarm Monitor 16.38
27007 - Baggage Inspector 13.28
27008 - Corrections Officer 15.46
27010 - Court Security Officer 18.42
27030 - Detection Dog Handler 15.32
27040 - Detention Officer 15.46
27070 - Firefighter 20.04
27101 - Guard I 13.28
27102 - Guard II 15.32
27131 - Police Officer I 19.75
27132 - Police Officer II 21.94
28000 - Recreation Occupations
28041 - Carnival Equipment Operator 12.70
28042 - Carnival Equipment Repairer 13.54
28043 - Carnival Worker 9.73
28210 - Gate Attendant/Gate Tender 13.69
28310 - Lifeguard 11.12
28350 - Park Attendant (Aide) 15.32
28510 - Recreation Aide/Health Facility Attendant 11.18
28515 - Recreation Specialist 18.97
28630 - Sports Official 12.19
28690 - Swimming Pool Operator 16.24
29000 - Stevedoring/Longshoremen Occupational Services
29010 - Blocker And Bracer 23.61
29020 - Hatch Tender 23.61
29030 - Line Handler 23.61
29041 - Stevedore I 22.17
29042 - Stevedore II 24.83
30000 - Technical Occupations
30010 - Air Traffic Control Specialist, Center (HFO) (see 2) 38.15

30011 - Air Traffic Control Specialist, Station (HFO) (see 2) 26.30
30012 - Air Traffic Control Specialist, Terminal (HFO) (see 2) 28.97
30021 - Archeological Technician I 17.11
30022 - Archeological Technician II 17.58
30023 - Archeological Technician III 21.62
30030 - Cartographic Technician 23.50
30040 - Civil Engineering Technician 22.23
30051 - Cryogenic Technician I 24.57
30052 - Cryogenic Technician II 27.14
30061 - Drafter/CAD Operator I 15.66
30062 - Drafter/CAD Operator II 17.58
30063 - Drafter/CAD Operator III 21.02
30064 - Drafter/CAD Operator IV 26.04
30081 - Engineering Technician I 15.84
30082 - Engineering Technician II 17.79
30083 - Engineering Technician III 20.11
30084 - Engineering Technician IV 24.92
30085 - Engineering Technician V 30.15
30086 - Engineering Technician VI 36.50
30090 - Environmental Technician 27.69
30095 - Evidence Control Specialist 20.76
30210 - Laboratory Technician 21.20
30221 - Latent Fingerprint Technician I 24.78
30222 - Latent Fingerprint Technician II 27.37
30240 - Mathematical Technician 21.56
30361 - Paralegal/Legal Assistant I 17.68
30362 - Paralegal/Legal Assistant II 21.89
30363 - Paralegal/Legal Assistant III 26.77
30364 - Paralegal/Legal Assistant IV 32.40
30375 - Petroleum Supply Specialist 25.42
30390 - Photo-Optics Technician 22.28
30395 - Radiation Control Technician 25.42
30461 - Technical Writer I 20.66
30462 - Technical Writer II 25.28
30463 - Technical Writer III 30.58
30491 - Unexploded Ordnance (UXO) Technician I 24.24
30492 - Unexploded Ordnance (UXO) Technician II 29.33
30493 - Unexploded Ordnance (UXO) Technician III 35.16
30494 - Unexploded (UXO) Safety Escort 24.24
30495 - Unexploded (UXO) Sweep Personnel 24.24
30501 - Weather Forecaster I 24.57
30502 - Weather Forecaster II 29.88
30620 - Weather Observer, Combined Upper Air Or (see 2) 21.02
Surface Programs
30621 - Weather Observer, Senior (see 2) 22.04
31000 - Transportation/Mobile Equipment Operation Occupations
31010 - Airplane Pilot 29.33
31020 - Bus Aide 11.76
31030 - Bus Driver 16.52
31043 - Driver Courier 15.57
31260 - Parking and Lot Attendant 10.30
31290 - Shuttle Bus Driver 16.60
31310 - Taxi Driver 11.14
31361 - Truckdriver, Light 16.60
31362 - Truckdriver, Medium 17.62
31363 - Truckdriver, Heavy 19.83
31364 - Truckdriver, Tractor-Trailer 19.83
99000 - Miscellaneous Occupations
99020 - Cabin Safety Specialist 14.30

99030 - Cashier 9.65
99050 - Desk Clerk 10.96
99095 - Embalmer 25.37
99130 - Flight Follower 24.24
99251 - Laboratory Animal Caretaker I 11.14
99252 - Laboratory Animal Caretaker II 13.06
99260 - Marketing Analyst 25.29
99310 - Mortician 25.37
99410 - Pest Controller 19.18
99510 - Photofinishing Worker 12.75
99710 - Recycling Laborer 14.64
99711 - Recycling Specialist 17.31
99730 - Refuse Collector 13.25
99810 - Sales Clerk 11.51
99820 - School Crossing Guard 13.38
99830 - Survey Party Chief 22.65
99831 - Surveying Aide 15.00
99832 - Surveying Technician 20.59
99840 - Vending Machine Attendant 14.69
99841 - Vending Machine Repairer 17.66
99842 - Vending Machine Repairer Helper 14.69

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.48 per hour or \$179.20 per week or \$776.53 per month

HEALTH & WELFARE EO 13706: \$4.18 per hour, or \$167.20 per week, or \$724.53 per month*

*This rate is to be used only when compensating employees for performance on an SCA-covered contract also covered by EO 13706, Establishing Paid Sick Leave for Federal Contractors. A contractor may not receive credit toward its SCA obligations for any paid sick leave provided pursuant to EO 13706.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or

on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541.400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

- (1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;
- (2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;
- (3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- (4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am.

If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

** HAZARDOUS PAY DIFFERENTIAL **

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder.

All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a

bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

**** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS ****

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

**** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) ****

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b)(2)(i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.
- 6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b)(2)(iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" should be used to compare job definitions to ensure that duties

requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c)(1)).

SECTION J - ATTACHMENT 3

Wage Rate Determinations

WD 15-4771 (Rev.-10) was first posted on www.wdol.gov on 05/07/2019

REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor | WAGE AND HOUR DIVISION
| WASHINGTON D.C. 20210

| Wage Determination No.: 2015-4771
Daniel W. Simms Division of | Revision No.: 10
Director Wage Determinations | Of Revision: 05/02/2019

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

State: Ohio

Area: Ohio Counties of Adams, Athens, Gallia, Highland, Jackson, Meigs, Pike, Ross, Scioto, Vinton

Fringe Benefits Required Follow the Occupational Listing

- OCCUPATION CODE - TITLE FOOTNOTE RATE
01000 - Administrative Support And Clerical Occupations
01011 - Accounting Clerk I 14.29
01012 - Accounting Clerk II 16.05
01013 - Accounting Clerk III 17.95
01020 - Administrative Assistant 24.51
01035 - Court Reporter 18.49
01041 - Customer Service Representative I 11.38
01042 - Customer Service Representative II 12.80
01043 - Customer Service Representative III 13.97
01051 - Data Entry Operator I 12.82
01052 - Data Entry Operator II 13.99
01060 - Dispatcher, Motor Vehicle 18.76
01070 - Document Preparation Clerk 13.80
01090 - Duplicating Machine Operator 13.80
01111 - General Clerk I 12.93
01112 - General Clerk II 14.11
01113 - General Clerk III 15.84
01120 - Housing Referral Assistant 19.32
01141 - Messenger Courier 11.94
01191 - Order Clerk I 13.92
01192 - Order Clerk II 15.71
01261 - Personnel Assistant (Employment) I 15.69
01262 - Personnel Assistant (Employment) II 17.56
01263 - Personnel Assistant (Employment) III 19.57
01270 - Production Control Clerk 22.45

01290 - Rental Clerk 10.78
01300 - Scheduler, Maintenance 15.49
01311 - Secretary I 15.49
01312 - Secretary II 17.33
01313 - Secretary III 19.32
01320 - Service Order Dispatcher 16.68
01410 - Supply Technician 24.51
01420 - Survey Worker 13.53
01460 - Switchboard Operator/Receptionist 11.38
01531 - Travel Clerk I 12.86
01532 - Travel Clerk II 13.72
01533 - Travel Clerk III 14.55
01611 - Word Processor I 14.16
01612 - Word Processor II 15.91
01613 - Word Processor III 17.80
05000 - Automotive Service Occupations
05005 - Automobile Body Repairer, Fiberglass 19.56
05010 - Automotive Electrician 16.60
05040 - Automotive Glass Installer 15.87
05070 - Automotive Worker 15.87
05110 - Mobile Equipment Servicer 14.42
05130 - Motor Equipment Metal Mechanic 17.26
05160 - Motor Equipment Metal Worker 15.87
05190 - Motor Vehicle Mechanic 16.77
05220 - Motor Vehicle Mechanic Helper 14.33
05250 - Motor Vehicle Upholstery Worker 15.13
05280 - Motor Vehicle Wrecker 15.87
05310 - Painter, Automotive 16.60
05340 - Radiator Repair Specialist 15.87
05370 - Tire Repairer 13.87
05400 - Transmission Repair Specialist 17.26
07000 - Food Preparation And Service Occupations
07010 - Baker 16.06
07041 - Cook I 14.66
07042 - Cook II 16.06
07070 - Dishwasher 11.31
07130 - Food Service Worker 11.31
07210 - Meat Cutter 16.06
07260 - Waiter/Waitress 12.28
09000 - Furniture Maintenance And Repair Occupations
09010 - Electrostatic Spray Painter 22.00
09040 - Furniture Handler 14.52
09080 - Furniture Refinisher 22.00
09090 - Furniture Refinisher Helper 17.02
09110 - Furniture Repairer, Minor 19.72
09130 - Upholsterer 22.00
11000 - General Services And Support Occupations
11030 - Cleaner, Vehicles 14.87
11060 - Elevator Operator 14.30
11090 - Gardener 14.66
11122 - Housekeeping Aide 14.30
11150 - Janitor 14.30
11210 - Laborer, Grounds Maintenance 12.28
11240 - Maid or Houseman 10.04
11260 - Pruner 11.22
11270 - Tractor Operator 13.88
11330 - Trail Maintenance Worker 12.28
11360 - Window Cleaner 15.74
12000 - Health Occupations

12010 - Ambulance Driver 13.65
12011 - Breath Alcohol Technician 18.39
12012 - Certified Occupational Therapist Assistant 28.48
12015 - Certified Physical Therapist Assistant 28.11
12020 - Dental Assistant 17.20
12025 - Dental Hygienist 30.41
12030 - EKG Technician 25.69
12035 - Electroneurodiagnostic Technologist 25.69
12040 - Emergency Medical Technician 13.65
12071 - Licensed Practical Nurse I 16.44
12072 - Licensed Practical Nurse II 18.39
12073 - Licensed Practical Nurse III 20.50
12100 - Medical Assistant 14.05
12130 - Medical Laboratory Technician 23.61
12160 - Medical Record Clerk 14.36
12190 - Medical Record Technician 16.06
12195 - Medical Transcriptionist 16.45
12210 - Nuclear Medicine Technologist 32.00
12221 - Nursing Assistant I 12.16
12222 - Nursing Assistant II 13.68
12223 - Nursing Assistant III 14.93
12224 - Nursing Assistant IV 16.76
12235 - Optical Dispenser 18.43
12236 - Optical Technician 16.44
12250 - Pharmacy Technician 13.63
12280 - Phlebotomist 13.59
12305 - Radiologic Technologist 25.82
12311 - Registered Nurse I 23.69
12312 - Registered Nurse II 28.98
12313 - Registered Nurse II, Specialist 28.98
12314 - Registered Nurse III 35.06
12315 - Registered Nurse III, Anesthetist 35.06
12316 - Registered Nurse IV 42.02
12317 - Scheduler (Drug and Alcohol Testing) 22.78
12320 - Substance Abuse Treatment Counselor 19.42
13000 - Information And Arts Occupations
13011 - Exhibits Specialist I 21.15
13012 - Exhibits Specialist II 26.20
13013 - Exhibits Specialist III 32.05
13041 - Illustrator I 21.15
13042 - Illustrator II 26.20
13043 - Illustrator III 32.05
13047 - Librarian 29.01
13050 - Library Aide/Clerk 13.98
13054 - Library Information Technology Systems
Administrator 26.20
13058 - Library Technician 15.90
13061 - Media Specialist I 18.91
13062 - Media Specialist II 21.15
13063 - Media Specialist III 23.57
13071 - Photographer I 18.38
13072 - Photographer II 20.57
13073 - Photographer III 25.48
13074 - Photographer IV 31.00
13075 - Photographer V 37.51
13090 - Technical Order Library Clerk 18.26
13110 - Video Teleconference Technician 18.91
14000 - Information Technology Occupations
14041 - Computer Operator I 14.61

14042 - Computer Operator II 18.72
14043 - Computer Operator III 21.15
14044 - Computer Operator IV 22.66
14045 - Computer Operator V 25.09
14071 - Computer Programmer I (see 1) 21.74
14072 - Computer Programmer II (see 1) 24.22
14073 - Computer Programmer III (see 1)
14074 - Computer Programmer IV (see 1)
14101 - Computer Systems Analyst I (see 1)
14102 - Computer Systems Analyst II (see 1)
14103 - Computer Systems Analyst III (see 1)
14150 - Peripheral Equipment Operator 14.61
14160 - Personal Computer Support Technician 22.66
14170 - System Support Specialist 26.37
15000 - Instructional Occupations
15010 - Aircrew Training Devices Instructor (Non-Rated) 28.90
15020 - Aircrew Training Devices Instructor (Rated) 34.97
15030 - Air Crew Training Devices Instructor (Pilot) 41.92
15050 - Computer Based Training Specialist / Instructor 28.90
15060 - Educational Technologist 33.25
15070 - Flight Instructor (Pilot) 41.92
15080 - Graphic Artist 19.34
15085 - Maintenance Test Pilot, Fixed, Jet/Prop 41.92
15086 - Maintenance Test Pilot, Rotary Wing 41.92
15088 - Non-Maintenance Test/Co-Pilot 41.92
15090 - Technical Instructor 21.77
15095 - Technical Instructor/Course Developer 26.63
15110 - Test Proctor 17.57
15120 - Tutor 17.57
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations
16010 - Assembler 10.07
16030 - Counter Attendant 10.07
16040 - Dry Cleaner 12.51
16070 - Finisher, Flatwork, Machine 10.07
16090 - Presser, Hand 10.07
16110 - Presser, Machine, Drycleaning 10.07
16130 - Presser, Machine, Shirts 10.07
16160 - Presser, Machine, Wearing Apparel, Laundry 10.07
16190 - Sewing Machine Operator 13.38
16220 - Tailor 14.26
16250 - Washer, Machine 10.71
19000 - Machine Tool Operation And Repair Occupations
19010 - Machine-Tool Operator (Tool Room) 17.98
19040 - Tool And Die Maker 21.26
21000 - Materials Handling And Packing Occupations
21020 - Forklift Operator 16.57
21030 - Material Coordinator 22.45
21040 - Material Expediter 22.45
21050 - Material Handling Laborer 12.37
21071 - Order Filler 12.45
21080 - Production Line Worker (Food Processing) 16.57
21110 - Shipping Packer 15.91
21130 - Shipping/Receiving Clerk 15.91
21140 - Store Worker I 13.71
21150 - Stock Clerk 18.29
21210 - Tools And Parts Attendant 16.57
21410 - Warehouse Specialist 16.57
23000 - Mechanics And Maintenance And Repair Occupations
23010 - Aerospace Structural Welder 23.52

23019 - Aircraft Logs and Records Technician 19.22
23021 - Aircraft Mechanic I 22.55
23022 - Aircraft Mechanic II 23.52
23023 - Aircraft Mechanic III 24.44
23040 - Aircraft Mechanic Helper 16.68
23050 - Aircraft, Painter 21.60
23060 - Aircraft Servicer 19.22
23070 - Aircraft Survival Flight Equipment Technician 21.60
23080 - Aircraft Worker 20.46
23091 - Aircrew Life Support Equipment (ALSE) Mechanic 20.46 I
23092 - Aircrew Life Support Equipment (ALSE) Mechanic 22.55 II
23110 - Appliance Mechanic 22.17
23120 - Bicycle Repairer 18.47
23125 - Cable Splicer 35.17
23130 - Carpenter, Maintenance 20.80
23140 - Carpet Layer 22.19
23160 - Electrician, Maintenance 32.75
23181 - Electronics Technician Maintenance I 25.55
23182 - Electronics Technician Maintenance II 28.15
23183 - Electronics Technician Maintenance III 29.39
23260 - Fabric Worker 20.16
23290 - Fire Alarm System Mechanic 23.20
23310 - Fire Extinguisher Repairer 18.87
23311 - Fuel Distribution System Mechanic 28.75
23312 - Fuel Distribution System Operator 23.10
23370 - General Maintenance Worker 18.77
23380 - Ground Support Equipment Mechanic 22.55
23381 - Ground Support Equipment Servicer 19.22
23382 - Ground Support Equipment Worker 20.46
23391 - Gunsmith I 18.87
23392 - Gunsmith II 21.52
23393 - Gunsmith III 23.96
23410 - Heating, Ventilation And Air-Conditioning 19.85
Mechanic
23411 - Heating, Ventilation And Air Conditioning 20.73
Mechanic (Research Facility)
23430 - Heavy Equipment Mechanic 22.94
23440 - Heavy Equipment Operator 24.12
23460 - Instrument Mechanic 24.45
23465 - Laboratory/Shelter Mechanic 22.89
23470 - Laborer 12.37
23510 - Locksmith 22.65
23530 - Machinery Maintenance Mechanic 24.40
23550 - Machinist, Maintenance 19.47
23580 - Maintenance Trades Helper 14.77
23591 - Metrology Technician I 24.45
23592 - Metrology Technician II 25.50
23593 - Metrology Technician III 26.50
23640 - Millwright 24.45
23710 - Office Appliance Repairer 22.43
23760 - Painter, Maintenance 20.90
23790 - Pipefitter, Maintenance 23.67
23810 - Plumber, Maintenance 22.67
23820 - Pneudraulic Systems Mechanic 23.96
23850 - Rigger 23.96
23870 - Scale Mechanic 21.52
23890 - Sheet-Metal Worker, Maintenance 23.87
23910 - Small Engine Mechanic 21.01
23931 - Telecommunications Mechanic I 26.52

23932 - Telecommunications Mechanic II 27.66
23950 - Telephone Lineman 27.50
23960 - Welder, Combination, Maintenance 19.07
23965 - Well Driller 23.69
23970 - Woodcraft Worker 23.96
23980 - Woodworker 18.87
24000 - Personal Needs Occupations
24550 - Case Manager 14.70
24570 - Child Care Attendant 9.32
24580 - Child Care Center Clerk 11.66
24610 - Chore Aide 10.69
24620 - Family Readiness And Support Services 14.70
Coordinator
24630 - Homemaker 14.70
25000 - Plant And System Operations Occupations
25010 - Boiler Tender 30.09
25040 - Sewage Plant Operator 20.88
25070 - Stationary Engineer 30.09
25190 - Ventilation Equipment Tender 22.23
25210 - Water Treatment Plant Operator 20.88
27000 - Protective Service Occupations
27004 - Alarm Monitor 19.40
27007 - Baggage Inspector 14.16
27008 - Corrections Officer 22.58
27010 - Court Security Officer 21.76
27030 - Detection Dog Handler 15.86
27040 - Detention Officer 22.58
27070 - Firefighter 20.76
27101 - Guard I 14.16
27102 - Guard II 15.86
27131 - Police Officer I 21.11
27132 - Police Officer II 23.46
28000 - Recreation Occupations
28041 - Carnival Equipment Operator 14.75
28042 - Carnival Equipment Repairer 15.58
28043 - Carnival Worker 12.01
28210 - Gate Attendant/Gate Tender 17.79
28310 - Lifeguard 11.90
28350 - Park Attendant (Aide) 19.88
28510 - Recreation Aide/Health Facility Attendant 14.52
28515 - Recreation Specialist 24.31
28630 - Sports Official 15.84
28690 - Swimming Pool Operator 17.67
29000 - Stevedoring/Longshoremen Occupational Services
29010 - Blocker And Bracer 20.70
29020 - Hatch Tender 20.70
29030 - Line Handler 20.70
29041 - Stevedore I 19.54
29042 - Stevedore II 21.78
30000 - Technical Occupations
30010 - Air Traffic Control Specialist, Center (HFO) (see 2) 40.06
30011 - Air Traffic Control Specialist, Station (HFO) (see 2) 27.63
30012 - Air Traffic Control Specialist, Terminal (HFO) (see 2) 30.42
30021 - Archeological Technician I 17.53
30022 - Archeological Technician II 19.61
30023 - Archeological Technician III 24.30
30030 - Cartographic Technician 24.30
30040 - Civil Engineering Technician 24.16
30051 - Cryogenic Technician I 25.69

30052 - Cryogenic Technician II 28.38
30061 - Drafter/CAD Operator I 17.53
30062 - Drafter/CAD Operator II 19.61
30063 - Drafter/CAD Operator III 21.86
30064 - Drafter/CAD Operator IV 26.90
30081 - Engineering Technician I 15.58
30082 - Engineering Technician II 18.24
30083 - Engineering Technician III 20.23
30084 - Engineering Technician IV 25.29
30085 - Engineering Technician V 30.93
30086 - Engineering Technician VI 37.42
30090 - Environmental Technician 23.88
30095 - Evidence Control Specialist 23.20
30210 - Laboratory Technician 28.20
30221 - Latent Fingerprint Technician I 25.69
30222 - Latent Fingerprint Technician II 28.38
30240 - Mathematical Technician 24.30
30361 - Paralegal/Legal Assistant I 20.15
30362 - Paralegal/Legal Assistant II 24.96
30363 - Paralegal/Legal Assistant III 30.53
30364 - Paralegal/Legal Assistant IV 36.94
30375 - Petroleum Supply Specialist 28.38
30390 - Photo-Optics Technician 22.89
30395 - Radiation Control Technician 28.38
30461 - Technical Writer I 25.25
30462 - Technical Writer II 30.89
30463 - Technical Writer III 37.37
30491 - Unexploded Ordnance (UXO) Technician I 25.46
30492 - Unexploded Ordnance (UXO) Technician II 30.80
30493 - Unexploded Ordnance (UXO) Technician III 36.92
30494 - Unexploded (UXO) Safety Escort 25.46
30495 - Unexploded (UXO) Sweep Personnel 25.46
30501 - Weather Forecaster I 25.69
30502 - Weather Forecaster II 31.24
30620 - Weather Observer, Combined Upper Air Or (see 2) 21.86
Surface Programs
30621 - Weather Observer, Senior (see 2) 24.30
31000 - Transportation/Mobile Equipment Operation Occupations
31010 - Airplane Pilot 30.80
31020 - Bus Aide 13.92
31030 - Bus Driver 19.58
31043 - Driver Courier 12.98
31260 - Parking and Lot Attendant 11.85
31290 - Shuttle Bus Driver 14.04
31310 - Taxi Driver 10.80
31361 - Truckdriver, Light 14.04
31362 - Truckdriver, Medium 16.62
31363 - Truckdriver, Heavy 17.94
31364 - Truckdriver, Tractor-Trailer 17.94
99000 - Miscellaneous Occupations
99020 - Cabin Safety Specialist 15.02
99030 - Cashier 9.30
99050 - Desk Clerk 10.14
99095 - Embalmer 27.93
99130 - Flight Follower 25.46
99251 - Laboratory Animal Caretaker I 15.97
99252 - Laboratory Animal Caretaker II 16.78
99260 - Marketing Analyst 28.20
99310 - Mortician 27.93

99410 - Pest Controller 18.71
99510 - Photofinishing Worker 13.38
99710 - Recycling Laborer 16.93
99711 - Recycling Specialist 20.08
99730 - Refuse Collector 15.38
99810 - Sales Clerk 10.32
99820 - School Crossing Guard 15.22
99830 - Survey Party Chief 22.18
99831 - Surveying Aide 14.69
99832 - Surveying Technician 20.16
99840 - Vending Machine Attendant 16.80
99841 - Vending Machine Repairer 19.44
99842 - Vending Machine Repairer Helper 16.80

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.48 per hour or \$179.20 per week or \$776.53 per month

HEALTH & WELFARE EO 13706: \$4.18 per hour, or \$167.20 per week, or \$724.53 per month*

*This rate is to be used only when compensating employees for performance on an SCA-covered contract also covered by EO 13706, Establishing Paid Sick Leave for Federal Contractors. A contractor may not receive credit toward its SCA obligations for any paid sick leave provided pursuant to EO 13706.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, 4 weeks after 15 years, and 5 weeks after 25 years.

Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of eleven paid holidays per year: New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.)(See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541. 400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformances may be

necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

- (1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;
- (2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;
- (3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- (4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am.

If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

**** HAZARDOUS PAY DIFFERENTIAL ****

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder.

All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

**** UNIFORM ALLOWANCE ****

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment

such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

**** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS ****

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

**** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) ****

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b)(2)(i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.
- 6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b)(2)(iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c)(1)).

SECTION J - ATTACHMENT 3

Wage Rate Determinations

General Decision Number: TN190076 01/04/2019 TN76

Superseded General Decision Number: TN20180077

State: Tennessee

Construction Type: Building

County: Anderson County in Tennessee.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date
0 01/04/2019

BOIL0453-003 03/01/2018

Rates Fringes

BOILERMAKER.....\$ 30.07 21.61

BRTN0005-006 05/01/2018

Rates Fringes

BRICKLAYER.....\$ 27.03 2.29

CARP0050-002 05/01/2016

Rates Fringes

CARPENTER (Includes Scaffold
Building and Excludes Drywall
Hanging).....\$ 25.33 11.41

ELEC0760-006 06/01/2018

Rates Fringes

ELECTRICIAN (Including
Electrical Installer (Alarms)...\$ 25.12 11.30

ENGI0917-016 05/01/2017

Rates Fringes

Power Equipment Operator
Backhoe/Trackhoe/Excavator..\$ 28.26 10.10
Bulldozer.....\$ 28.26 10.10
Crane.....\$ 28.26 10.10
Forklift.....\$ 25.97 10.10
Grader/Blade.....\$ 25.97 10.10

* IRON0384-005 05/01/2018

Rates Fringes

IRONWORKER, STRUCTURAL AND
REINFORCING.....\$ 27.77 14.22

LABO0818-001 05/01/2017

Rates Fringes

Laborers:
GROUP 1.....\$ 19.77 6.53
GROUP 2.....\$ 20.12 6.53

GROUP 1: Common or General, Landscaping

GROUP 2: Form Work

PAIN0437-009 05/01/2015

Rates Fringes

PAINTER (Including Brush,
Roller, Spray and Drywall
Finishing/Taper).....\$ 26.43 10.05

PLAS0078-001 05/01/2015

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 31.00 .06

PLUM0102-004 05/01/2018

Rates Fringes

PIPEFITTER, Includes HVAC
Pipe Installation.....\$ 29.01 13.90

PLUM0102-009 05/01/2018

Rates Fringes

PLUMBER (Excluding HVAC Pipe
Installation).....\$ 29.01 13.90

SHEE0005-012 05/01/2017

Rates Fringes

SHEET METAL WORKER (Including
Metal Building Erector (Metal
Siding/Wall Panel and HVAC
Duct Installation (Excluding
Metal Roof Installation).....\$ 28.56 11.99

SUTN2009-075 09/21/2009

Rates Fringes

CARPENTER (Drywall Hanging
Only).....\$ 13.00 0.25

HVAC MECHANIC (Installation
of HVAC Unit Only, Excludes
Installation of HVAC Pipe and
Duct).....\$ 12.75 1.49

LABORER: Mason Tender - Brick...\$ 12.82 0.00

LABORER: Roof Tearoff.....\$ 9.75 0.49

OPERATOR: Bobcat/Skid
Steer/Skid Loader.....\$ 17.05 0.00

OPERATOR: Mechanic.....\$ 18.33 3.67

OPERATOR: Paver (Asphalt,
Aggregate, and Concrete).....\$ 13.50 0.00

OPERATOR: Roller.....\$ 13.98 0.00

ROOFER: Built up Roof.....\$ 12.74 0.00

ROOFER: Rubber Roof.....\$ 16.82 4.77

ROOFER: Single Ply Roof.....\$ 16.50 0.32

SHEET METAL WORKER (Metal
Roofs Installation).....\$ 15.64 0.00

TILE FINISHER.....\$ 10.00 0.74

TRUCK DRIVER: Dump Truck.....\$ 12.56 0.00

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average ate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number,005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: OH190051 05/03/2019 OH51

Superseded General Decision Number: OH20180072

State: Ohio

Construction Type: Building

County: Pike County in Ohio.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

- 0 01/04/2019
- 1 01/18/2019
- 2 02/15/2019
- 3 03/01/2019
- 4 05/03/2019

ASBE0080-001 03/07/2016

Rates Fringes

ASBESTOS WORKER/HEAT & FROST
 INSULATOR.....\$ 31.98 20.99

BROH0039-001 06/01/2017

Rates Fringes

BRICKLAYER.....\$ 30.84 14.67

BROH0055-007 06/01/2017

Rates Fringes

TILE FINISHER.....\$ 26.66 6.00
 TILE SETTER.....\$ 26.90 13.04

ELEC0575-004 12/31/2018

Rates Fringes

ELECTRICIAN (Excludes Low Voltage Wiring and

Installation of Alarms).....\$ 32.75 16.81

ELEC0972-008 06/01/2017

Rates Fringes

ELECTRICIAN (Low Voltage
Wiring and Alarm Installation
Only).....\$ 32.81 24.54

ELEV0011-002 01/01/2019

Rates Fringes

ELEVATOR MECHANIC.....\$ 45.73 33.705+a+b

PAID HOLIDAYS:

a. New Year's Day, Memorial Day, Independence Day, Labor Day,
Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.

b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

* ENGI0018-022 05/01/2019

Rates Fringes

POWER EQUIPMENT OPERATOR
Bobcat/Skid Steer/Skid
Loader; Bulldozer.....\$ 37.27 14.86
Crane.....\$ 37.39 14.86
Forklift.....\$ 36.23 14.86

IRON0550-012 05/01/2018

Rates Fringes

IRONWORKER, ORNAMENTAL.....\$ 27.60 19.61

IRON0769-001 06/01/2018

Rates Fringes

IRONWORKER, STRUCTURAL.....\$ 31.67 25.27

LABO0083-003 06/01/2018

Rates Fringes

LABORER
Common or General; Mason
Tender - Brick &
Cement/Concrete.....\$ 35.41 10.90

PAIN0093-003 12/01/2018

Rates Fringes

PAINTER (Brush and Roller).....\$ 25.88 18.50

PAIN1195-001 12/01/2018

Rates Fringes

GLAZIER.....\$ 31.70 11.12

PLAS0132-011 06/01/2017

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 29.94 20.57

PLUM0577-001 06/01/2018

Rates Fringes

PIPEFITTER (Excludes HVAC
Pipe Installation).....\$ 29.75 23.85

PLUM0577-003 06/01/2018

Rates Fringes

PLUMBER (Includes HVAC Pipe
Installation).....\$ 29.75 23.85

SFOH0669-009 04/01/2017

Rates Fringes

SPRINKLER FITTER (Fire
Sprinklers).....\$ 36.33 15.84

SHEE0024-010 06/01/2017

Rates Fringes

SHEET METAL WORKER (HVAC Duct
and Unit Installation Only).....\$ 28.32 24.71

SHEE0033-008 07/01/2017

Rates Fringes

SHEET METAL WORKER (Excludes
HVAC Duct and Unit
Installation).....\$ 30.21 24.82

* UAVG-OH-0001 01/01/2019

Rates Fringes

IRONWORKER, REINFORCING.....\$ 29.44 22.68

* UAVG-OH-0002 01/01/2019

Rates Fringes

ROOFER.....\$ 30.19 15.73

SUOH2012-053 08/29/2014

Rates Fringes

CARPENTER.....\$ 25.80 12.54

DRYWALL FINISHER/TAPER.....\$ 20.66 4.91

DRYWALL HANGER AND METAL STUD
INSTALLER.....\$ 22.27 14.40

LABORER: Pipelayer.....\$ 18.37 4.79

OPERATOR:

Backhoe/Excavator/Trackhoe.....\$ 29.18 10.69

OPERATOR: Loader.....\$ 22.69 8.01

OPERATOR: Paver (Asphalt,
Aggregate, and Concrete).....\$ 23.91 10.42

TRUCK DRIVER: Dump (All Types)...\$ 19.33 6.55

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this

classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1,2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Section J, Attachment 4
GOVERNMENT PROPERTY

Eight (8) DOE-owned AC-100 centrifuges currently stored at ACO's Technology Manufacturing Center in Oak Ridge, TN
Hydrotested and certified 5" cylinders, valves used for the HALEU Cascade Operations

NOTE: Other equipment/material identified in ACO's definitization proposal to be added.

SECTION J - ATTACHMENT 5

Reporting Requirements

The following deliverables are required under the Contractor; however, additional reports may be required by specific clauses in the Contract.

Report	Due Date	Reference
Monthly Status Report	10 th day of each month	Section C.6
Integrated Project Schedule	30 days after award of letter contract	Section C.6
Work Breakdown Structure and Baseline	30 days after award of letter contract	Section C.6
Estimating System Disclosure	60 days after award of letter contract	H.3 DOE-H-2023 Cost Estimating System Requirements (Oct 2014)
Accounting System Disclosure	60 days after award of letter contract	H.4 DOE-H-2025 Accounting System Administration (Oct 2014) (Revised)
Property Management System Disclosure	60 days after award of letter contract	H.4 DOE-H-2027 Contractor Property Management System Administration (Oct 2014) (Revised)
Diversity Program	30 days after award of the letter contract	H.9 DOE-H-2046 Diversity Program (Oct 2014)
Diversity Report	Annually, on the anniversary of the letter contract award date	H.9 DOE-H-2046 Diversity Program (Oct 2014)
Workplace Substance Abuse Program	Within 30 days of letter contract award	H.27 DOE-H-2079 Agreement Regarding Workplace Substance Abuse Programs At Doe Sites (Apr 2018) (Revised)
Indirect and Revised Billing Rates	Annually, Within 6 months following expiration of Contractor Fiscal Year	FAR 52.216-7, Allowable Cost and Payment

**2019 Executive Incentive Plan
Plan Document and Summary Plan Description
(Annual Award, Long-Term Incentive Awards)**

Purpose

The purpose of this 2019 Executive Incentive Plan (“Plan”), is to motivate executives and other key employees of Centrus Energy Corp and its affiliates (collectively, the “Company”) to make extraordinary efforts to increase the value of the Company’s shares and to achieve goals that are important to the Company in 2019 and beyond. The Plan arises under and is subject to the terms of the Centrus 2014 Equity Incentive Plan, as may be amended and/or restated from time to time (the “Equity Incentive Plan”). In the event of a conflict or inconsistency between the terms of this Plan and the terms of the Equity Incentive Plan, the Equity Incentive Plan shall control. If not otherwise defined herein, capitalized terms within this Plan shall have the same meaning as provided under the Equity Incentive Plan.

Overview

The Plan provides for two types of awards that may be granted in 2019: (1) an annual incentive award (“Annual Award”) payable in cash, and (2) a multi-year long-term incentive award (“Long-Term Award”). The Long-Term Incentive Award has two components: (1) a Performance Cash Award, based on established goals for the performance of the Company; and (2) an Equity Denominated Award payable in cash, equity, or a combination thereof.

Eligibility for Participation - Participants in the Plan are recommended by management and are approved by the Compensation, Nominating and Governance Committee (the “Committee”) of the Centrus Board of Directors. Plan participants are shown in the chart in Attachment I for each type of award.

2019 Annual Incentive Plan

The Plan's effective date (the "Effective Date") is January 1, 2019.

I. ANNUAL INCENTIVE AWARDS

A. **Target Awards** - The Performance Period for an Annual Award shall be the period from January 1, 2019 through December 31, 2019. Individuals who become participants in the Plan after the Effective Date may have their Target Annual Award (defined below) prorated to reflect their participation date. The proration will be calculated based on the participant's number of days of Company employment in 2019 divided by 365.

1. The target Annual Award under the Plan for each participant for the applicable Performance Period (the "Target Annual Award") shall be as follows:

Target Participation Chart	
Level	2019 Target Annual Award (percent of base salary as determined by the Committee)
President & CEO	100%
Senior Vice Presidents	60%-80%
Vice Presidents	60%

2. Participants may receive up to 150% of the Target Annual Award based on the participant's individual performance recommended by the CEO and approved by the Committee, or in the case of the CEO, as approved by the Committee.

B. **Target Award Pool** - Target Annual Awards will be established for each participant based on a percentage of their base salary and his or her level within the Company as set forth in the chart above and in Attachment I. The sum of the target awards for all participants equals the Target Award Pool¹.

C. **Final Award Pool** - At the end of the performance period, the Committee will evaluate Management's performance relative to the Corporate Goals (discussed below). The Committee will establish an achievement level as a percentage from 0% to 150% based on the degree to which the goals were met. A Final Award Pool will be established by multiplying the Target Award Pool by the Corporate Goal achievement level, the sum of which creates the Final Award Pool. The sum of the total awards made to all participants cannot exceed the Final Award Pool without the consent of the Committee.

¹ The Target Award Pool for the Annual Incentives is company-wide and will include all Centrus employees that are eligible to receive an annual incentive award. For non-executives, target annual awards are 5% to 40% of base salary (as determined by management). Consequently, the Target Award Pool described in this section includes all employees eligible to receive an annual award.

Hypothetical Example of Target and Final Award Pool Calculation

Participants	Base Salary	Target Award (% of Base Salary)	Target Award Amount (\$)	2019 Pool Calculation	
				Year-End Corporate Goal Achievement	FINAL Award Pool
	\$250,000	80%	\$200,000		
Executives	\$180,000	60%	\$108,000		
	\$160,000	20%	\$32,000		
All Other Participants	\$75,000	5%	\$3,750		
Target Award Pool			\$5,500,000	97%	\$5,335,000

II. ESTABLISHING GOALS

- A. **Corporate Goals** - Corporate Goals shall be designated from among the various performance criteria under the Equity Incentive Plan and approved by the Committee.
1. The Committee has approved 5 Corporate Goals for 2019 (see Attachment II).
 - i. Each goal has performance metrics that define 100% achievement for each goal.
 - ii. The Committee has the discretion to adjust any goal or target where it believes that such an adjustment is appropriate in supporting business objectives or is otherwise contemplated by the Equity Incentive Plan.
 2. Goals are weighted to recognize their importance in achieving business success in 2019.
 3. Annual goals and goal weights will be approved by the Committee prior to or on or about March 30 of each year for which the goals apply.
- B. **Certification of Performance** - Following the completion of the Performance Period for the Annual Award, the CEO will review the achievement of the Corporate Goals and will recommend to the Committee a proposed level of performance, with appropriate supporting documentation. The Committee will determine a final level of achievement for each goal and certify an overall level of performance on the Corporate Goals.
- C. **Final Award** - The participant's individual Target Award will be multiplied by the achievement level of the Corporate Goals as certified by the Committee (0% to 150%). This will establish the participant's Final Target Award. Management will then, based on its assessment of the participant's performance throughout the year, determine each participant's Final Award as (0% to 150%) of the Final Target Award. The sum of all Final Awards cannot exceed the Final Award Pool without the consent of the Committee.
- The CEO will review and approve the Final Award rating for each participant.
 - The Committee will review and approve the performance rating for the CEO and each other participant.

III. TIME AND FORM OF PAYMENT

- A. Annual Awards will be paid only following the Committee's certification of the level of attainment of the applicable Corporate Goals, and except as expressly provided in Section I of "Plan Administration", such payment will be conditioned on the participant's continued employment with the Company on the payment date.
- B. Such awards, when earned, will be paid in cash in a lump sum, subject to applicable withholding and subject to Section 19.1 of the Equity Incentive Plan, including any compensation recovery or "clawback" policy the Company may have in effect at the time the Award is paid.
- C. Payment of Annual Awards, to the extent earned, will be made as soon as practicable after the Committee's certification of the level of attainment of the applicable Corporate Goal(s) after the end of the applicable Performance Period.

Long-Term Incentive Plan

I. PLAN DESIGN/PERFORMANCE PERIOD

The Long-Term Incentive Plan ("LTIP") is designed to reward performance over 3-year overlapping performance periods. The initial performance period for the ongoing program is from January 1, 2019 through December 31, 2021 (the "Initial Award"). Each participant in the initial 2019-2021 performance period will also receive a one-time award covering 2019-2020, which is intended to provide a bridge towards the ongoing program (the "Stub Award"). The LTIP is designed to focus management efforts on achieving strategic goals that require multi-year efforts, enhance alignment of incentives to business strategy and operations, and build on the tactical results achieved on an annual basis. The LTIP has two vehicles:

1. **Performance Cash Award** - A cash award tied to the achievement of specific strategic business transition goals over the defined performance period, which accounts for 50% of the total long-term incentive opportunity.
2. **Equity Denominated Award** - An award tied to the performance of Centrus Class A common stock over the defined performance period, which accounts for 50% of the total long-term incentive payment opportunity

II. PERFORMANCE CASH AWARD

- A. **Target Award** - The Performance Cash Award will comprise 50% of each participant's total long-term incentive opportunity for both the Initial Award and the Stub Award
 - Each participant may receive between 0% and 150% of his or her target award based on the Company's achievement of the long-term goals.
 - The participant's award will be determined by multiplying his or her target award by the Company's achievement relative to the long-term goals as certified by the Committee. Each participant will be evaluated based on the same Corporate Goals and achievement level.

- B. Performance Cash Award Goals** -The Performance Goals/Targets are approved by the Committee at the beginning of the Performance Period. The Performance Goals /Targets for the Initial and Stub Awards are included in Attachments I and III.
- Such Performance Goals/Targets may, in the Committee’s discretion, include a threshold level of performance, below which no Long-Term Award will be paid, and a maximum level of performance at which 150% of the target Long-Term Award may be paid. The Committee may score performance between the threshold and target performance and between target and maximum performance.
 - Management will periodically update the Committee on performance relative to the Performance Goals/Targets.
 - i. The Committee will have the discretion to adjust any goal or target where it believes that such an adjustment is appropriate in supporting business objectives or is otherwise contemplated by the Equity Incentive Plan.
- C. Payout for Performance Cash Award**
- The Committee will certify the level of achievement for the applicable Performance Goals/Targets, and based on the level of achievement, the amount of the Long-Term Award. Payout of the Performance Cash Award and the Equity Denominated award will occur at the same time, e.g. as soon as practicable after the Equity Denominated award can be determined (see below).
- D. Settlement of the Performance Cash Award**
- Payment of the Stub Award will be determined following the Committee’s certification of the level of attainment after filing of the Company’s Annual Report on Form 10-K for the final year of the Stub Award performance period (i.e., fiscal year ending 2020) and will be paid no later than May 1, 2021.
 - Payment of the Initial Award will be determined following the Committee’s certification of the level of attainment after filing of the Company’s Annual Report on Form 10-K for the final year of the Initial Award performance period (i.e., for fiscal year ending 2021) and will be paid no later than May 1, 2022.

Performance Cash Award Structure			
Target Calculation			
Hypothetical Base Salary =		\$300,000	
2019 Initial Award Target Opportunity (one-third of annual salary)		\$100,000	
Initial Award Target Performance Cash Award = 50% of total LTI (remainder applied to Equity Denominated Award)		\$50,000	
2019 Stub Award Target Opportunity (two-thirds of annual salary)		\$200,000	
Stub Award Target Performance Cash Award (50% of total Stub Award)		\$100,000	
Total Cash Award Value (Initial Award + Stub Award)		\$150,000	
	Overall % Goal Achievement	Payout	% of Target (target = \$150,000)
Example of Payouts (hypothetical)			
2021 Stub Award Payout (covering 2019 and 2020)	0.95	\$95,000	
2022 Initial Award Payout (covering 2019 through 2021)	1.01	\$50,500	
Total Payout		\$145,500	97%

III. EQUITY DENOMINATED AWARD

Under the terms of the Equity Incentive Plan, the Committee can authorize an award of equity to individuals. Such an award may be any form of equity identified in the Equity Incentive Plan. This includes: restricted stock, restricted stock units, share appreciation rights, performance shares or stock options. Incentives tied to the performance of Centrus common stock increases the alignment between management and shareholders.

A. Target Equity Denominated Award

- The Equity Denominated Award will comprise 50% of each participant's total long-term incentive opportunity for both the Initial Award and the Stub Award (the "Target Equity Denominated Award").

B. Notional Units

- The Target Equity Denominated Award is determined by dividing the participant's target award opportunity by the Starting Share Price of Centrus Class A common stock. The result will be an equivalent number of Notional Units.
- The number of units will be rounded up or down to the nearest full share.
- Participants will not receive actual shares, but the number of Notional Units will be used to calculate the Equity Denominated Award.
- Notional Units will not convey any rights to the participant to receive actual shares, sell shares or have voting rights based on the Notional Units.

C. Starting Share Price

- Calculated as the average price of Centrus common stock for the 20 trading days following the filing of the Company's Annual Report on Form 10-K for the preceding year end (i.e. 2018).

D. Ending Share Price

- Calculated as the average price of Centrus common stock for the 20 trading days following the filing of the Company's Annual Report on Form 10-K for the final year of the performance period (i.e., 2020 for the 2-year Stub Award and 2021 for the Initial Award period).

E. Final Award

- For the Stub Award, participants will be eligible for a payout in 2021 (covering 2019 and 2020) and for the Initial Award, participants will be eligible for a payout in 2022 (covering 2019 through 2021).
- Both payouts are based on the Notional Units determined using the 2019 Starting Share Price.
- All awards will be based on the Starting and Ending Share Price for the applicable performance period.

F. Settlement of the Award

- Awards will be settled following the Committee's certification of the Ending Share Price.
- Settlement of any award based on the Notional Units may be made, in the form of cash, Centrus common stock, or any combination of the two at the discretion of the Committee.
- The participant will be entitled to receive in settlement of the award an amount equal to the number of Notional Units issued to the participant multiplied by the applicable Ending Share Price.

G. Unrestricted Shares

- Should all or a portion of the award be made in the form of Centrus common stock, these shares would be unrestricted and become taxable to the participant at that time.

Equity Denominated Award - Payment Structure			
Target Grant Calculation			
Hypothetical Base Salary		\$300,000	
2019 Initial Award Target Opportunity (one-third of annual salary)		\$100,000	
Target Initial Award Equity Denominated Grant = 50% of total LTI (remainder applied to Performance vehicle)		\$50,000	
Stub Award Target Opportunity (two-thirds of annual salary)		\$200,000	
Stub Award Equity Denominated Grant (50% of total Stub Award)		\$100,000	
Total Equity Denominated Grant value (Initial Award + Stub Award)		\$150,000	
Share Value			
Starting Share Price (1)		\$2.50	
Number of Notional Units			
Total Target Equity Denominated Grant divided by starting share price		60,000	
Stub Award shares covering 2019 and 2020 (payout in 2021) -2/3 of total		40,000	
Initial Award shares covering 2019 through 2021 (payout in 2022) - 1/3 of total		20,000	
Example of Payouts (hypothetical)	Ending Share Price	Payout	% of Target (target = \$150,000)
2021 Stub Award Payout - covering 2019 and 2020 (2)	\$3.00	\$120,000	
2022 Initial Award Payout - covering 2019-2021 (grant is based on 2019 start price) (3)	\$3.20	\$64,000	
Total Payout		\$184,000	123%
(1) Starting share value TBD (<i>hypothetical</i>)			
(2) Ending share value TBD (<i>hypothetical</i>)			
(3) Ending share value TBD (<i>hypothetical</i>)			

IV. TIME AND FORM OF PAYMENT

Long-Term Awards will be paid only following the Committee’s certification of the level of attainment of the applicable Performance Goal(s), and except as expressly provided in Section I of “Plan Administration” below, such payment will be conditioned on the participant’s continued employment with the Company on the payment date. Such awards, when earned, will be paid in cash in a lump sum, or in the case of the equity denominated awards, may be paid in cash, Centrus common stock, or as a combination of the two at the Committee’s discretion. Payments will be subject to applicable withholding and subject to Section 19.1 of the Equity Incentive Plan, including any compensation recovery or “claw-back” policy the Company may have in effect at the time the Award is paid.

- A. **Long-Term Performance Cash Awards** - Payment of any Long-Term Performance Cash Award, to the extent earned, will be made as soon as practicable following the Committee’s certification of the level of attainment of performance goals after filing of the Company’s Annual Report on Form 10-K for the final year of the performance period.

During 2019, there will be two Performance Cash Award grants; one associated with achieving the 2019-2020 Stub Award targets; and one associated with achieving the 2019-2021 Initial Award targets.

- B. Long-Term Equity Denominated Awards** - Long-term Equity Denominated Awards are based on the performance of Centrus Class A common stock over the applicable Performance Period.

During 2019, there will be two equity grant payouts: one associated with the value of the common stock from the Starting Share Price for 2019, to the Ending Share Price in 2021 (the Stub Award); and one associated with the value of the common stock from the Starting Share Price for 2019 to the Ending Share Price in 2022 (the Initial Award). Payment will be made as soon as practicable following the Committee's certification of the applicable Ending Share Price.

- C. Future Performance Periods** - A new three-year LTIP performance period is anticipated to begin each year as determined by the Committee such that the periods overlap and provide a payout each year. The target total long-term incentive over each three-year period is anticipated to continue to be 100% of the participant's annual salary; however, the proportion paid as performance cash awards and equity denominated awards may change based on evolving Company circumstances.

PLAN ADMINISTRATION

I. EFFECT OF TERMINATION OF SERVICE

- A. Death or Disability.** If a participant's employment is terminated due to Death or Disability (as defined in Section 409A of the Code) prior to payment of an Annual Award or Long-Term Award, the participant (or beneficiary, in the case of Death) will be entitled to payment of a pro-rated portion of the applicable Annual Award or Long-Term Award.

The Annual Award payment will be based on the participant's individual Target Award multiplied by a fraction, the numerator of which is the number of days the participant was employed by the Company during the applicable performance period and the denominator of which is the number of days in the applicable performance period (the "Proration Fraction"). The prorated Target Award will be multiplied by the achievement level of Corporate Goals certified by the Committee pursuant to this Plan (i.e., payment will be based on actual performance) and adjusted by management based on assessment of the participant's performance. The Annual Award payment will be paid at the same time as payouts are made to actively employed participants.

The calculation and timing of the payment of the Performance Cash Award portion of the Long-Term Award depends on when during the Performance Period, Death or Disability occurs. If Death or Disability occurs prior to the final year of a performance period: (i) the Performance Cash Award payment amount will be based on the participant's target Performance Cash Award for the performance period multiplied by the Proration Fraction; (ii) the amount of the award will be equal to the prorated target (i.e., the amount will assume achievement of goals at target level), and (iii) the Performance Cash Award will be paid within

60 days of the date of the participant's termination of employment. If Death or Disability occurs during the final year of a performance period: (i) the Performance Cash Award payment amount will be based on the participant's target Performance Cash Award for the performance period multiplied by the Proration Fraction; (ii) the prorated target will be multiplied by the achievement level certified by the Committee for the applicable performance period, and (iii) the Performance Cash Award will be paid at the same time as payouts are made to actively employed participants.

The Equity Denominated Award will be based on the number of Notional Units awarded to the participant for the performance period multiplied by the Proration Fraction. The Ending Share Price shall be determined as provided in this Plan following the filing of the Company's Annual Report on Form 10-K for the final year of the performance period, and payment will be made at the same time as payment is made for actively employed participants.

- B. Termination Without Cause or Retirement.** Except as provided in Section D. Change in Control, if a participant's employment is terminated due to involuntary separation from service by the Company other than for Cause (as defined in the Equity Incentive Plan), if a participant has a separation from service for Good Reason (as defined in the participant's Change in Control Agreement), or if a participant Retires (as defined below) prior to the payment of the incentive awards, then the awards shall be paid as follows:
1. The amount payable under the Plan shall be the amount of the award that would have been paid based on actual performance had the participant remained actively employed, multiplied by the Pro-Ration Fraction. The pro-rated Award shall be paid subject to the participant's execution (without revocation) of a general release of claims in substantially the form provided under the Company's Executive Severance Plan.
 2. The pro-rated Award shall be paid at the same time and using the same performance results and stock calculation as Awards paid to participants who remain actively employed by the Company, multiplied by the Pro-Ration Fraction.
 3. For this purpose, "Retirement" is defined as having met the age and service requirements to qualify for an unreduced benefit under the Employees' Retirement Plan of Centrus Energy Corp., regardless of whether the individual was a participant in that plan at the time of his or her retirement.
- C. Other Termination of Employment** - If the participant incurs a termination of employment for any other reason (not set forth above) prior to payment of an Annual Award or a Long-Term Award, including a voluntary termination of employment without Good Reason, or termination for Cause, such unpaid Awards will be forfeited.
- D. Change in Control** - Notwithstanding anything herein or the Executive Severance Plan to the contrary, if a participant's employment is involuntarily terminated by the Company other than for Cause or is terminated by the participant for Good Reason in either case within three months prior to or within one year following a Change in Control (as defined in the Equity Incentive Plan), the Committee will immediately vest and pay out (i) the Annual Award on the 60th day following such termination as though the applicable Performance Goal(s) had been achieved at the target level and (ii) the Long-Term Awards on the regular payment dates based on actual performance through the end of the applicable Performance Period, and multiplied by

the Pro-Ration Fraction. Awards will be paid on the date when all other awards are paid. The payment of any such Award shall be subject to the participant's execution (without revocation) of a general release of claims in substantially the form provided under the Company's Executive Severance Plan. For purposes of this Plan, "Good Reason" shall have the same meaning defined for that term in the participant's Change in Control Agreement.

II. OTHER ADMINISTRATIVE MATTERS

A. 409A Matters

1. Notwithstanding anything to the contrary in this Plan, Annual Incentive Awards payable under this Plan are intended not to be deferred compensation within the meaning of Section 409A of the Code, and the Plan will be administered and interpreted to be consistent with that intention. Annual Incentive Awards that are earned will be made as soon as practicable after the Committee's certification of the level of attainment of the applicable Performance Goal(s) after the end of the applicable Performance Period, but in no event later than the 15th day of the third month after the later of the last day of the calendar year or the last day of the fiscal year in which they are earned.
2. Long-Term Incentive Awards shall be treated as deferred compensation within the meaning of Section 409A of the Code, and this Plan will be administered and interpreted to be consistent with that intention. In that regard, in the event that the participant is a "specified employee" within the meaning of Section 409A at the time of the termination (other than due to death), then notwithstanding anything contained in this Plan to the contrary, the Long-Term Incentive Award shall be delayed and paid on the first business day following the date that is six months following the date of participant's termination of employment, or earlier upon such participant's death. Each payment payable under this Plan that is considered to be deferred compensation subject to Code Section 409A is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

B. Effect of Awards on Other Benefits - An Annual Award, to the extent earned, but not a Long-Term Award, will, as reasonably determined by the Committee in good faith, be considered in the definition of pay used to determine, as applicable: (1) the participant's severance benefits under the Centrus Energy Executive Severance Plan or any other severance plan in which he or she participates, (2) the participant's severance benefits under his or her Change in Control agreement with the Company, and (3) the GVUL executive life insurance benefit administered through MetLife. Except as provided above in this section, amounts payable to any participant under the Plan shall not be taken into account in computing the participant's compensation for purposes of determining any pension, retirement, death or other benefit under a pension, retirement, profit sharing, bonus, insurance or other employee benefit plan of the Company, except as such other plan or agreement shall otherwise expressly provide.

C. Participants Joining the Plan After the Effective Date - In certain cases a participant may join this Plan during the course of the Performance Period (either as a participant in the Annual Award, the Long-Term Award or both). Those individuals will be treated as partial participants as outlined below.

1. If an employee becomes eligible to participate in the Annual Award and/or the Long-Term Award for 2019 after the Effective Date either through promotion or by subsequent hiring by the Company, the employee's Target Annual Award or target Long-Term Award will be established according to the Target Participation Chart (above), or as otherwise indicated above, which will be multiplied by the Pro-ration Fraction.
2. If an employee is promoted and by that promotion is eligible to participate in this Plan at a higher Target Annual Award level, then his or her award shall be prorated based on the amount of time as a participant at each level (prior and new) and the base salary used in the calculation of any award shall be the salary in place while participating at each level. The sum of the two pro-rations will equal the participant's revised Target Annual Award.
3. If, due to special circumstances, an employee who is not at one of the levels set forth in the Target Participation Chart (above) and who is not subject to Section 16 of the Securities Exchange Act of 1934 becomes eligible to participate in the Plan, the applicable target percentage of base salary for such individual will be determined by the CEO, as approved by the Committee, but will not exceed the maximum target percentage for the Vice President level as shown in the Target Participation Chart. Any awards earned will be pro-rated, as previously described.

SEPARATION AGREEMENT, WAIVER AND RELEASE

This is a Separation Agreement, Waiver and Release (“Agreement”) between Marian Davis (“Executive”) and Centrus Energy Corp. (together with its subsidiaries and affiliate, the “Company”). The Company and the Executive agree that they have entered into this Agreement voluntarily, and that it is intended to be a legally binding commitment between them.

1. In consideration for the promises made herein by the Executive, the Company agrees as follows:

(a) In full consideration of Executive’s execution of this Agreement, and Executive’s agreement to be legally bound by its terms, the Company agrees to pay to Executive the gross sum of \$212,493 which is an amount equal to Executive’s pro rata 2019 Incentive Plan (Bonus) paid through the Executive’s Separation Date (as defined below), paid at target 100% individual performance and at target 100% of corporate goals upon the next regularly scheduled pay day after the 8th day following the Executive’s execution of this Agreement (the “Effective Date,”) or the next regularly scheduled pay day after the Separation Date, whichever is later;

(b) The Executive will remain an Executive of the Company and use her vacation starting September 16, 2019 until October 4, 2019, (the “Separation Date”). It is understood and agreed by the Executive and the Company, that the Executive will continue to serve as the Chief Financial Officer of the Company until the earlier of (i) the Executive’s Separation Date or (ii) the date the appointment of a new Chief Financial Officer is effective. During the period until the Executive’s Separation Date, her pay and benefits will remain unchanged but in the event a new Chief Financial Officer is appointed her title and duties will no longer include serving as the Chief Financial Officer, as of the date the appointment is effective. The Company will pay the Executive an amount for the remaining earned but unused vacation on the next regularly scheduled pay day after the Separation Date.

(c) The Company agrees that, subject to the sections below, it will not, nor will it cause or assist any other person to, make any statement to a third party or take any action which is intended to or would reasonably have the effect of disparaging or harming the business reputation of the Executive.

(d) The Company will continue to indemnify the Executive on the terms and subject to the conditions set forth in the Company’s Bylaws and Certificate of Incorporation as a former officer and employee of the Company.

2. In consideration for and contingent upon the Executive’s right to receive the payments described in Section 1, the Executive hereby agrees as follows:

(a) **General Waiver and Release.** Except as provided in Paragraph 2(b) below, Executive and any person acting through or under the Executive hereby release, waive and forever discharge the Company, its past subsidiaries and its past and present subsidiaries and affiliates, and their respective successors and assigns, and their respective present or past officers, trustees, directors, shareholders, executives and agents of each of them, from any and all claims, demands, actions, liabilities and other claims for relief and remuneration whatsoever (including without limitation attorneys’ fees and expenses), whether known or unknown, absolute, contingent or otherwise (each, a “Claim”), arising or which could have arisen up to and including the date of his execution of this Release, including without limitation those arising out of or relating to Executive’s employment or cessation and termination of employment, or any other written or oral agreement, any change in Executive’s employment status, any benefits or compensation, any tortious injury, breach of contract, wrongful discharge (including any Claim for constructive discharge), infliction of emotional distress, slander, libel or defamation of character, and any Claims arising under the United States Constitution, the Maryland Constitution, Title VII of the Civil Rights Act of 1964 (as amended by the Civil Rights Act of 1991), the Americans With Disabilities Act, the Rehabilitation Act of 1973, the Fair Labor Standards Act, the Family and Medical Leave Act, the National Labor Relations Act, the Labor-Management Relations Act, the Equal Pay Act, the Older Workers Benefits Protection Act, the Workers Retraining and Notification Act, the Age Discrimination in Employment Act, the Employee Retirement Income Security Act of 1974, Section 211 of the Energy Reorganization Act of 1974, the Maryland Human Rights Act, or any other federal, state or local statute, law, ordinance, regulation, rule or executive order, any tort or contract claims, and any of the claims, matters and issues which could have been asserted by Executive against the Company or its subsidiaries and affiliates in any legal, administrative or other proceeding. Executive agrees that if any action is brought in his

or her name before any court or administrative body, Executive will not accept any payment of monies in connection therewith.

This waiver excludes, and the Executive does not waive, release, or discharge: (i) any right to file an administrative charge or complaint with, testify, assist, or participate in an investigation, hearing, or proceeding conducted by, the U.S. Equal Employment Opportunity Commission or other similar federal or state administrative agencies, although the Executive waives any right to monetary relief related to any filed charge or administrative complaint; (ii) claims that cannot be waived by law, such as claims for unemployment benefits, workers' compensation, his or her right to vested benefits, such as pension or retirement benefits, under the written terms of any applicable plan documents; (iii) any medical claim or any judgment or monetary awards or settlements that may arise related to medical benefits under the group health plan sponsored by the Company. (iv) claims arising after the Separation Date; (v) any right to indemnification or directors' and officers' liability insurance coverage to which the Executive is otherwise entitled in accordance with the Company's or any subsidiary's certificate of incorporation or by-laws or an individual indemnification agreement; (v) claims that are not otherwise waivable under applicable law; (vi) Executive's right to enforce this Agreement; and (vii) any claims arising under any Federal or state securities laws that Executive may have as a stockholder of the Company.

(b) No Other Amounts Due. Executive agrees that this Release specifies payment from the Company to himself or herself, the total of which meets or exceeds any and all funds due him or her by the Company, and that, subject to the last paragraph of Section 2(a), he or she will not seek to obtain any additional funds from the Company or any of its subsidiaries or affiliates with the exception of non-reimbursed business expenses. The Executive represents and warrants that he or she has not filed any claims, complaints, or actions of any kind against the Company with any court of law, or local, state, or federal government agency.

(c) Non-Competition, Non-Solicitation and Confidential Information. Executive warrants that Executive will comply fully with the requirements of the non-competition, non-solicitation, and protection of confidential information provisions set forth as follows:

(i) Confidentiality. The Executive acknowledges that he or she has obtained secret, proprietary, or confidential materials, knowledge, data or any other information relating to the Company or any of its affiliated companies, and their respective businesses ("Confidential Information") during the Executive's employment by the Company or any of its affiliated companies and that such Confidential Information is not public knowledge (other than by acts by the Executive or representatives of the Executive in violation of this Agreement). For a period of five years thereafter with respect to Confidential Information that does not include trade secrets, and (b) any time thereafter with respect to Confidential Information that does include trade secrets, the Executive shall not, without the prior written consent of the Company or as may otherwise be required by law or legal process, communicate or divulge any Confidential Information to anyone other than the Company and those designated by it.

The Company and the Executive each acknowledge and agree that the provisions regarding confidentiality shall not affect the Executive's obligation to cooperate with any government investigation or to respond truthfully to any lawful governmental inquiry or to give truthful testimony in court.

(ii) Non-Competition and Non-Solicitation. The Executive shall not, for a period of (1) year following her Separation Date, (i) engage or become interested as an owner or stockholder (other than as an owner or stockholder of less than five percent (5%) of the stock of a publicly owned company), partner, director, officer, employee (in an executive capacity), consultant or otherwise in any business that is competitive with the uranium enrichment business conducted by the Company or any of its affiliated companies as of the date of the Executive's termination of employment, as applicable; (ii) engage in any activity in competition with or against the uranium enrichment business conducted by the Company or any of its affiliated companies as of the date of the Executive's termination of employment; or (iii) recruit, solicit for employment, hire or engage any employee or consultant of the Company or any of its affiliated companies or any person who was an employee or consultant of the Company or any of its affiliated companies during the two (2) years prior to the date of the Executive's termination of employment. For purposes of this Section, a business that is competitive with the uranium enrichment business conducted by the Company or any of its affiliated companies shall include, but not be limited to, URENCO USA (f/k/a Louisiana Energy Services Inc. (LES)), Orano, Urenco Ltd., Urenco, Inc., TENEX, GLE (Global Laser Enrichment), Cameco, and any subsidiary or affiliate thereof engaged in a business that is competitive with the uranium enrichment business conducted by the Company or any of its affiliated companies, and any contractor or subcontractor to any of these businesses (with respect to activities by such contractor or subcontractor that are competitive with the uranium enrichment business conducted by the Company or any of its affiliated companies).

The Executive acknowledges that these provisions are necessary for the Company's protection and are not unreasonable, since the Executive would be able to obtain employment with companies whose businesses are not competitive with the uranium enrichment business of the Company and its affiliated companies and would be able to recruit and hire personnel other than employees of the Company or any of its affiliated companies. The duration and scope of these restrictions on the Executive's activities are divisible, so that if any provision of this paragraph is held or deemed to be invalid, that provision shall be automatically modified to the extent necessary to make it valid.

(iii) Non-Disparagement. The Executive agrees that, subject to the sections below, he or she will not, nor will he or she cause or assist any other person to, make any statement to a third party or take any action which is intended to or would reasonably have the effect of disparaging or harming the Company or the business reputation of the Company's present or former officers, directors, employees, or agents.

(iv) Nuclear, Workplace, Public Safety and Sarbanes-Oxley Concerns. The Executive understands and acknowledges that nothing in the Agreement prohibits, penalizes, or otherwise discourages the Executive from reporting, providing testimony regarding, or otherwise communicating any nuclear safety concern, workplace safety concern, public safety concern, or concern of any sort, to the U.S. Nuclear Regulatory Commission, the U.S. Department of Labor, or any federal or state government agency. The Executive further understands and acknowledges that nothing in this Agreement conditions or restricts the Executive's communication with, or full cooperation in proceedings or investigations by, any federal or state agency. The Executive also understands and acknowledges that nothing in this Agreement shall be construed to prohibit him or her from engaging in any activity protected by the Sarbanes-Oxley Act, 18 U.S.C. Section 1514A or Section 211 of the Energy Reorganization Act of 1974, as amended.

(v) No Effect on Other Restrictive Covenants. The provisions of this section shall not affect any restrictive covenants relating to confidentiality, non-competition, non-solicitation, non-disparagement or other matters contained in any individual change in control agreement, employment agreement or other agreement between the Executive and the Company, which restrictive covenants shall remain in full force and effect in accordance with their terms.

(d) Equitable Relief and Other Remedies.

(i) The Executive acknowledges that each of the provisions of Section 2 are reasonable and necessary to preserve the legitimate business interests of the Company, its present and potential business activities and the economic benefits derived therefrom; that they will not prevent him or her from earning a livelihood in the Executive's chosen business and are not an undue restraint on the trade of the Executive, or any of the public interests which may be involved.

(ii) The Executive agrees that the Company shall have the right to seek and obtain all appropriate injunctive and other equitable remedies, without posting bond therefor, except as required by law, in addition to any other rights and remedies that may be available at law or under this Agreement, it being acknowledged and agreed that any such breach would cause irreparable injury to the Company and that money damages would not provide an adequate remedy.

(iii) The parties agree that the covenants contained herein are severable. If an arbitrator or court shall hold that the duration, scope, area or activity restrictions stated herein are unreasonable under circumstances then existing, the parties agree that the maximum duration, scope, area or activity restrictions reasonable and enforceable under such circumstances shall be substituted for the stated duration, scope, area or activity restrictions to the maximum extent permitted by law. The parties further agree that the Company's rights under this Agreement should be enforced to the fullest extent permitted by law irrespective of whether the Company seeks equitable relief in addition to relief provided therein or if the arbitrator or court deems equitable relief to be inappropriate.

(h) Nondisclosure of Agreement. The Executive shall not disclose or cause to be disclosed the fact or terms of this Agreement to any person (other than the Executive's spouse or domestic/civil union partner, attorney, and tax advisor), except pursuant to a lawful subpoena, as set forth in the Reports to Government Entities clause below, or as otherwise permitted by law.

(i) Reports to Government Entities. Nothing in this Agreement, including the Confidentiality clause, restricts or prohibits the Executive from initiating communications directly with, responding to any inquiries from,

providing testimony before, providing confidential information to, reporting possible violations of law or regulation to, or from filing a claim or assisting with an investigation directly with a self-regulatory authority or a government agency or entity, including the U.S. Nuclear Regulatory Commission, the U.S. Equal Employment Opportunity Commission, the Department of Labor, the National Labor Relations Board, the Department of Justice, the Securities and Exchange Commission, the Congress, and any agency Inspector General (collectively, the "Regulators"), or from making other disclosures that are protected under the whistleblower provisions of state or federal law or regulation. However, to the maximum extent permitted by law, the Executive is waiving his or her right to receive any individual monetary relief from the Company or any others covered by this release resulting from such claims or conduct, regardless of whether the Executive or another party has filed them, and in the event the Executive obtains such monetary relief the Company will be entitled to an offset for the payments made pursuant to this Agreement. This Agreement does not limit the Executive's right to receive an award from any Regulator that provides awards for providing information relating to a potential violation of law. The Executive does not need the prior authorization of the Company to engage in conduct protected by this paragraph, and the Executive does not need to notify the Company that he has engaged in such conduct.

Please take notice that federal law provides criminal and civil immunity to federal and state claims for trade secret misappropriation to individuals who disclose a trade secret to their attorney, a court, or a government official in certain, confidential circumstances that are set forth at 18 U.S.C. §§ 1833(b)(1) and 1833(b)(2), related to the reporting or investigation of a suspected violation of the law, or in connection with a lawsuit for retaliation for reporting a suspected violation of the law.

(j) Acknowledgment of Voluntariness and Time to Review. Executive acknowledges that:

(i) Executive has read this Agreement in its entirety and understands it;

(ii) by this Agreement, Executive is advised to consult with and has had the opportunity to consult with an attorney before executing this Agreement;

(iii) Executive knowingly, freely, and voluntarily assents to all of this Agreement's terms and conditions including, without limitation, the waiver, release, and covenants contained in it;

(iv) Executive is signing this Agreement, including the waiver and release, in exchange for good and valuable consideration in addition to anything of value to which Executive is otherwise entitled;

(v) Executive is not waiving or releasing rights or claims that may arise after Executive signs this Agreement;

(vi) Executive understands that the waiver and release in this Agreement is being requested in connection with Executive's separation of employment from the Company;

(vii) Executive was offered at least twenty-one (21) days to consider his or her choice to sign this Agreement; and

(viii) Executive understands that he or she can revoke this Agreement within seven (7) days of signing it and that the Agreement does not become effective until the 8th day after that 7-day period has passed.

BY SIGNING BELOW, BOTH THE COMPANY AND EXECUTIVE AGREE THAT THEY UNDERSTAND AND ACCEPT EACH PART OF THIS AGREEMENT.

/s/ Marian Davis

(Executive)

10/10/19

DATE

CENTRUS ENERGY CORP.

/s/ Daniel B. Poneman

Daniel B. Poneman

President and Chief Executive Officer

10/10/19

DATE

Centrus Proprietary Information
Contract No. _____

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT is effective as of January 1, 2020 ("Effective Date"), between **CENTRUS Energy Corp.**, a Delaware corporation, the principal office of which is located at One Democracy Center, 6901 Rockledge Drive, Suite 800, Bethesda, Maryland 20817 (hereinafter referred to as "Centrus" or "Corporation"), and **Mr. Stephen Greene, an individual residing at ****** (hereinafter referred to as "Consultant").

IN CONSIDERATION of the mutual promises set forth herein, the parties hereby agree as follows:

1. This Consulting Agreement shall be effective as of the Effective Date and shall expire on June 30, 2020, unless sooner terminated pursuant to the terms hereof.
2. At the request of Centrus, Consultant shall perform the following work and services ("Services"):

Services are of an advisory nature, which may include, but not limited to:
 - Assistance and development of information on issues involving claims against the Company;
 - Preparation of information for meetings with senior officials from other Companies as well as with various Government officials;
 - Preparation of items to be discussed within the Company that are of strategic interest;
 - Preparation and discussion on the Company's pension plans;
 - Development of material on a variety of issues that may impact the Company.
3. Centrus shall compensate Consultant at a rate of \$400.00 per hour for the time actually spent in the performance of the Services. The rate includes all costs of operation, including benefits, overhead, and all applicable taxes. CENTRUS shall reimburse Consultant for reasonable and necessary travel expenses incurred by Consultant in performance of the Services in accordance with Centrus' travel expense policy. No other expenses shall be reimbursed unless agreed in writing in advance by the Buyer designated in Section 8.
4. Consultant shall expend its best professional efforts to perform this Consulting Agreement with all due diligence, economy and efficiency, in accordance with this agreement and applicable law and regulations.
5. The Consultant Agreement Terms and Conditions Form UE-319 (Centrus)(9/30/14) is incorporated herein by reference and made a part of this Consulting Agreement as if set forth herein.
6. This Consulting Agreement is to be governed by the laws of the State of Maryland.
7. The whole and entire agreement of the parties is set forth in this Consulting Agreement (including Form UE-319), and the parties are not bound by any agreements, understandings, statements or conditions other than those expressly set forth herein.

8. This Consulting Agreement may not be changed or modified in any manner except by a writing mutually agreed by the authorized representatives of the parties or their respective successors and permitted assigns. Consultant acknowledges and agrees that only Mr. Philip Strawbridge, Senior Vice President and Chief Financial Officer ("Buyer") is authorized to bind CENTRUS regarding assignment of any work, any changes or modifications to this Consulting Agreement or to approve payments or the reimbursement of expenses pursuant to this Consulting Agreement.

9. Any notice, request, demand, claim or other communication related to this Consulting Agreement shall be in writing and delivered by hand or transmitted by telecopier, registered mail (postage prepaid), or overnight courier to the other party at the following address:

If to CENTRUS: Centrus Energy Corp.
6901 Rockledge Drive
Suite 800
Bethesda, MD 20817
Attn: Philip Strawbridge, Senior Vice President and CFO

If to Consultant: Stephen Greene

IN WITNESS WHEREOF, the parties have executed this Consulting Agreement as of the Effective Date.

Centrus Energy Corp.

Stephen Greene

By: /s/ Philip Strawbridge

/s/ Stephen Greene

Philip Strawbridge

Senior Vice President and CFO

SUBSIDIARIES OF CENTRUS ENERGY CORP.

Name of Subsidiary

State of Incorporation

United States Enrichment Corporation

Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-200439, 333-218536) of Centrus Energy Corp. of our report dated March 26, 2020 relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland

March 26, 2020

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Daniel B. Poneman, certify that:

1. I have reviewed this annual report on Form 10-K of Centrus Energy Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 26, 2020

/s/ Daniel B. Poneman

Daniel B. Poneman

President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Philip O. Strawbridge, certify that:

1. I have reviewed this annual report on Form 10-K of Centrus Energy Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 26, 2020

/s/ Philip O. Strawbridge

Philip O. Strawbridge

Senior Vice President, Chief Financial Officer, Chief
Administrative Officer and Treasurer

CERTIFICATION OF CEO AND CFO PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report on Form 10-K of Centrus Energy Corp. for the period ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), pursuant to 18 U.S.C. § 1350, Daniel B. Poneman, President and Chief Executive Officer, and Philip O. Strawbridge, Senior Vice President, Chief Financial Officer, Chief Administrative Officer and Treasurer, each hereby certifies, that, to his knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Centrus Energy Corp.

March 26, 2020

/s/ Daniel B. Poneman

Daniel B. Poneman

President and Chief Executive Officer

March 26, 2020

/s/ Philip O. Strawbridge

Philip O. Strawbridge

Senior Vice President, Chief Financial Officer, Chief Administrative Officer and Treasurer