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, 2018

Commission file number 1-14287

Centrus Energy Corp.

Delaware	**52-2107911**
(State of incorporation)	*(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	**Name of each exchange on which registered**
Class A Common Stock, par value $0.10 per share	NYSE American
Rights to purchase Series A Participating Cumulative Preferred Stock, par value $1.00 per share	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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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	o	Smaller reporting company	☒
Accelerated filer	o	Emerging growth company	o
Non-accelerated filer	☒		

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 ☒

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☒ No o

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 30, 2018, was $17.8 million. As of March 1, 2019, there were 8,031,307 shares of the registrant's Class A Common Stock and 1,406,082 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 2019 annual meeting of shareholders to be filed subsequent to the date hereof 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 - that is, statements related to future events. In this context, forward-looking statements 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 outstanding 8.0% paid-in-kind ("PIK") toggle notes (the "8% PIK Toggle Notes") maturing in September 2019, our 8.25% notes (the "8.25% Notes") maturing in February 2027 and our Series B Senior Preferred Stock, including the potential termination of the guarantee by our principal subsidiary United States Enrichment Corporation ("Enrichment Corp.") of the 8% PIK Toggle Notes; 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 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; 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 entity Joint Stock Company “TENEX” (“TENEX”) under a commercial supply agreement with TENEX and deliveries under a long-term supply agreement with Orano Cycle (“Orano”); 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 services to us; 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 U.S. government, the Russian government or other governments that could affect our ability to perform 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; 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 the American Centrifuge project and our ability to obtain and/or perform under our future agreements with UT-Battelle, LLC (“UT-Battelle”), the management and operating contractor for Oak Ridge National Laboratory (“ORNL”), for continued research and development of the American Centrifuge technology; uncertainties regarding uses for the Piketon, Ohio facility that we lease from the DOE; the potential for further demobilization or termination of the American Centrifuge project; risks related to the current demobilization of portions of the American Centrifuge project, including risks that the schedule could be delayed and costs could be higher than expected; 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 contracts, including the risk that costs could be higher than expected; risks that we will be unable to obtain new business opportunities, achieve market acceptance of our services or that services provided by others will render our 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; 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; risks related to the identification of a material weakness in our internal controls over financial reporting; 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", 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: low-enriched uranium ("LEU"), which supplies various components of nuclear fuel to utilities, and contract services, which provides advanced engineering, design, and manufacturing services to government and private sector customers.

Our LEU business involves the sale of low-enriched uranium, 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 contract services 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, 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 and manufacturing advanced nuclear fuels and technologies 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. Based on our experience at our uranium enrichment facilities, we are also performing decontamination and decommissioning ("D&D") work for the U.S. government in Oak Ridge, Tennessee.

With our several decades of experience in enrichment, we also 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. To support U.S. energy and national security, we have been performing research and demonstration work on our advanced gas centrifuge uranium enrichment technology through contracts with UT-Battelle, LLC ("UT-Battelle"), the management and operating contractor of Oak Ridge National Laboratory ("ORNL") for the United States Department of Energy ("DOE").

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 seven years following the 2011 Fukushima accident, the published market prices for uranium enrichment declined more than 75 percent. While the monthly price indicators have gradually increased starting in September 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. 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.

Our Business Today

In 2018, our management team led the Company's successful efforts to add new sales and customers to the LEU order book, to diversify our supply at reduced cost, to expand into new areas of the nuclear power and complementary industries, and to reduce our future selling, general and administrative ("SG&A") costs. We have worked to diversify our supply and revenue streams and position ourselves for long-term financial strength as we seek to remain a trusted partner to the global nuclear industry and return value to our shareholders. Our competitive strengths include:

- **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 2018, we entered into new agreements with suppliers of enriched uranium, diversifying and expanding our sources of supply and improving our logistics for delivery of enriched uranium. In addition, we have 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.

- **Engineering, design, and manufacturing capabilities:** Our expertise and world-leading technical, engineering and manufacturing capabilities in Oak Ridge, Tennessee are creating new opportunities. First, we are leveraging our domestic enrichment experience and engineering know-how to assist private sector customers in production of fuel for next-generation nuclear reactors and the development of related facilities. Second, we are leveraging our significant experience in advanced manufacturing to support contract design, prototyping, and precision manufacturing work for commercial and government clients.

- **Enrichment technology development:** We have continued to advance our U.S. centrifuge technology in specialized facilities in Oak Ridge so that it could be deployed if and when needed for national security, advanced reactor fuel, or other government purposes, and/or deployed at a commercial scale enrichment facility over the long term once market conditions will support new capacity.

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 services. Centrus continues to be valued by our customers as a source of diversity, stability, and competition in the enrichment market.

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

Uranium and Enrichment

LEU consists of two components: separative work units (“SWU”) and uranium. 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 (“WNA”), 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 (“U^{235}”) and uranium-238 (“U^{238}”). The concentration of U^{235} in natural uranium is only 0.711% by weight. Most commercial nuclear power reactors require LEU fuel with a U^{235} concentration greater than natural uranium and up to 5% by weight. Future reactor designs currently under development will likely require higher U^{235} concentration levels of up to 20%. Uranium enrichment is the process by which the concentration of U^{235} is increased to that level.

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 U^{235} and depleted uranium having a lower percentage of U^{235}. 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 (“U_3O_8”) are combined with fluorine gas to produce uranium hexafluoride (“UF_6”), a solid at room temperature and a gas when heated. UF_6 is shipped to an enrichment plant.

Enrichment. UF_6 is enriched in a process that increases the concentration of the U^{235} isotope in the UF_6 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% U^{235}, 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.

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.

Products and Services

We operate the following two business segments: (1) Low-Enriched Uranium and (2) Contract Services.

Low-Enriched 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 85% of our total revenue in 2018. 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 (or the SWU and uranium components of LEU) from us. Our agreements for natural uranium sales are generally shorter-term, fixed-commitment contracts.

Contract Services

Our Contract Services segment reflects our technical, manufacturing and engineering services offered to our public and private sector customers. Our public-sector work has primarily focused on the American Centrifuge engineering and testing activities we have performed as a contractor for UT-Battelle. In addition, we are now performing D&D work for DOE at its facilities in Oak Ridge, Tennessee.

With our private-sector customers, we seek to leverage our domestic enrichment experience, engineering know-how, and advanced manufacturing capabilities, to assist customers with a range of engineering, design, and precision manufacturing projects, including the production of fuel for next-generation nuclear reactors and the development of related facilities. Our contracts with private sector and government customers are usually time-and-material or fixed-priced based and require delivery of contracted services or manufactured materials specified by the customer.

SWU and Uranium Sales Order Book

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. Our order book of sales under contract in the LEU segment (“order book”) extends to 2030. As of December 31, 2018, our order book was $1.0 billion compared to $1.3 billion at December 31, 2017, reflecting completed deliveries and new contracts signed in 2018 and rejection of a contract by a customer in bankruptcy proceedings. As of December 31, 2017, we had estimated that approximately 14% of our order book was at risk due to factors including customer financial conditions. We estimate that as of December 31, 2018, approximately 4% of our order book is at risk related to customer financial conditions or operations.

We anticipate our SWU and uranium revenue from the sales currently under contract in our order book will be in a range of $85 million to $120 million during 2019. Most of our contracts provide for fixed purchases of SWU during a given year. Our estimate of the aggregate dollar amount of future SWU and uranium sales 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 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 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,
- secondary suppliers including 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 at prices consistent with the current market.

Currently, our largest suppliers of SWU are the Russian government entity Joint Stock Company “TENEX” (“TENEX”) and the French government owned company Orano Cycle (formerly, AREVA NC) (“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. If we exercise this right to reschedule in full during the remaining years of the contract’s original term, we will have a rescheduled post-2022 purchase commitment through 2028.

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 that could adversely affect our ability to sell the purchased enrichment in the United States and other markets. The Russian Supply Agreement only gives us the right to use a portion of this quota, which is less than the amount of Russian LEU that we need to order to meet our SWU purchase obligations to TENEX. We can ask TENEX to make additional quota available to us, sell the SWU in foreign markets or secure a deferral to a future year of the portion of the purchase obligation under the Russian Supply Agreement for which we have insufficient quota. In the past we have been able to reach agreement with TENEX to either secure additional quota or defer our obligation, but TENEX’s willingness to enter into such agreements in the future is not known. Refer below to *—Competition and Foreign Trade - Limitations on Imports of LEU from Russia*.

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 U.S. 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 for deliveries in 2023 and beyond 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.

In April 2018, we entered into 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 may elect to begin to accept deliveries as early as 2021 or to defer the commencement of purchases until 2024 and 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 for purchases we make in 2019 and beyond, decreasing the unit costs per SWU for the duration of the contract.

The cost of sales per SWU reported in our financial statements are calculated by applying the average cost method to our entire inventory, including higher priced purchases we made in earlier years. Consequently, we expect our future costs of goods sold per SWU to significantly decrease over time beginning in 2019, as product is sold and revenue and costs are recognized. Given the unpredictability of the market and other factors, including pending U.S. government trade proceedings, there can be no assurance that the expected improvement will be realized near term.

Advanced Technology, Manufacturing, and Engineering Capability

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 August 2018. Market conditions, however, improved at the end of 2018 and are expected to improve further in the long term.

In February 2016, we completed a successful three-year demonstration of our American Centrifuge technology, with 120 advanced uranium enrichment gas centrifuge machines linked together in a cascade to simulate industrial operating conditions. Since September 2015, our government contracts with UT-Battelle have provided for continued engineering and testing work on the American Centrifuge technology at our facilities in Oak Ridge, Tennessee. On October 26, 2017, we entered into a contract with UT-Battelle for the period from October 1, 2017, through September 30, 2018. The contract provided for fixed payments upon completion of defined milestones and generated total revenue of $16.0 million. Funding for the program was provided to UT-Battelle by the federal government. Although the most recent contract expired September 30, 2018, we continue to perform work towards the expected milestones as the parties work toward a successor agreement; however, we have no assurance that a successor agreement will be executed.

On January 7, 2019, DOE issued a Notice of Intent to contract with Centrus to deploy a cascade of centrifuges to demonstrate the ability to produce HALEU, suitable for a range of military and civilian applications. While existing reactors currently in operation typically operate on LEU enriched so that the uranium-235 isotope concentration is just below 5%, HALEU has a uranium-235 concentration of up to 20%. HALEU is not commercially available today, but may be required in the future for a number of advanced reactor designs currently under development, for DOE nonproliferation efforts, or for some advanced fuel designs that may be suitable in the future for existing 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. Additionally, while Centrus has begun contract discussions with DOE about the proposed demonstration project, there is no assurance that a contract will be executed or that the project will go forward.

On March 26, 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.

On November 29, 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 run through September 30, 2019 with deliverables to be completed through November 30, 2019, and provide 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.

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 approximately 3%. Global LEU suppliers in our highly competitive industry compete primarily on the basis of price and secondarily on reliability of supply and customer service. The four largest LEU suppliers comprise an estimated 96% 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
- 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 (“WNA”) 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, but it has begun to supply LEU to international markets in recent years. CNEIC’s commercial SWU production capacity is estimated to be approximately 8 million SWU per year in 2019.

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.

Limitations on Imports of LEU from Russia

Imports into the United States of LEU and other uranium products produced in the Russian Federation, including LEU imported 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. These quotas limit the amount of Russian LEU that can be imported into the United States for U.S. consumption. At present, the quotas apply through 2020 and, for 2016-2020, are set at an amount equal to approximately 20% of projected annual U.S. consumption of LEU, based on a market report published in 2015 by the WNA.

As an exception to the quotas on imports of LEU for U.S. consumption, both the Russian Suspension Agreement and the September 2008 legislation permit unlimited imports of Russian LEU for use in initial cores for any new U.S. nuclear reactor.

It is possible that the quotas on imports of Russian LEU could change. Both the Russian Suspension Agreement and the September 2008 legislation require the U.S. Department of Commerce (“DOC”) to adjust the quotas in 2016 and 2019 based on changes in projected reactor demand as forecast by the WNA. In 2016, the DOC preliminarily determined that the adjustment would increase the quotas, but this increase was challenged by U.S. uranium mining companies, and, in May 2017, the DOC finally determined to increase the quota in 2018 and to reduce it in 2019 and 2020. However, because contracts approved by the DOC prior to the change in the quotas are not affected by the quota adjustment, this change in the quotas in 2019 and 2020 are not expected to materially affect imports of Russian LEU in those years pursuant to such contracts.

Additionally, as more fully explained below, the quotas on imports of Russian LEU could be extended beyond December 31, 2020, which is the current expiration date of quotas under both the Russian Suspension Agreement and the September 2008 legislation, if, for example, the Russian and U.S. governments were to agree on such an extension. On February 22, 2019, the DOC sent a letter to Rosatom formally opening consultations with Rosatom and TENEX with respect to a possible extension of the Russian Suspension Agreement. We cannot predict the outcome of these negotiations but they could result in an agreement on new quotas for the period after 2020.

Aside from the quotas on imports of Russian LEU that will be consumed in the United States, there is a separate quota that applies to deliveries of Russian LEU to foreign customers at U.S. fabrication facilities. This quota generally requires that the LEU be processed and re-exported within a certain period of time although, in 2014, the DOC approved our proposal that Japanese customers with which we have existing contracts be allowed to physically store certain amounts of Russian LEU in the United States pending the restart of nuclear reactors in Japan.

In October 2017, Louisiana Energy Services ("LES"), a U.S. subsidiary of Urenco, a foreign competitor, requested that the DOC conduct an administrative review of the Russian Suspension Agreement for the period October 2016 through September 2017. By statute, the purpose of an administrative review is to review the current status of, and compliance with the Russian Suspension Agreement during the period of the review. We are not aware of any violation of the Russian Suspension Agreement and in November 2018, the DOC preliminarily determined that there was no evidence of such a violation. However, in filings with the DOC, LES has requested the agency undertake a much broader review of whether the Russian Suspension Agreement continues to prevent the suppression or undercutting of price levels of domestic uranium products. In its November 2018 determination, the DOC stated that it would need additional time to collect all the evidence required to determine whether the Russian Suspension Agreement continues to prevent price suppression or undercutting. The date for the final determination is June 24, 2019.

At the conclusion of its review, the DOC could leave the Russian Suspension Agreement in place, reach an agreement with the Russian Federation that would modify the Russian Suspension Agreement, impose additional or different restrictions on imports of Russian uranium products, including LEU, beyond 2020 or terminate the Russian Suspension Agreement and restart the suspended antidumping investigation.

Imposition of additional restrictions or the restart of the investigation accompanied by an imposition of duties could adversely affect our financial condition and operations and could make it economically difficult or impossible for us to continue to import Russia LEU or sell the amounts required to be purchased under the Russian Supply Agreement. In that case, we would need to find alternative supplies of LEU to meet our obligations to U.S. customers, and also find alternative markets outside the United States in which to sell the Russian SWU that we are obligated to purchase from TENEX but which we could not import or sell in the United States. Alternatively, if, instead of restarting the investigation, the DOC agrees with the Russian government to modify the Russian Suspension Agreement and extend or impose new restrictions on imports of Russian LEU, our ability to continue to deliver Russian LEU to customers would depend upon whether we could secure an exception under those new restrictions or a share of any quota granted to TENEX.

We are actively participating in the administrative review and seeking to ensure that the Russian Suspension Agreement is implemented in a manner that does not adversely impact our existing contracts, including the Russian Supply Agreement, or our ability to continue to offer a diverse supply to our customers in the United States. The administrative review is expected to conclude in mid-2019.

In October 2018, LES requested DOC to also conduct an administrative review of the Russian Suspension Agreement for the period October 2017 through September 2018. This review will be in addition to the current review. In October 2019 and 2020, LES and other domestic parties will have additional opportunities to request that the DOC conduct administrative reviews.

Absent an agreement between the DOC and the Russian government to extend the Russian Suspension Agreement, the Russian Suspension Agreement (and the antidumping order that it suspended) will expire at the end of 2020. The quotas under the September 2008 legislation also are scheduled to expire at the end of 2020. As noted above, on February 22, 2019, the DOC sent a letter to Rosatom formally opening consultations with Rosatom and TENEX with respect to a possible extension of the Russian Suspension Agreement. We cannot predict the outcome of these negotiations but they could result in an agreement on new quotas for the period after 2020.

Limitations on Imports of LEU from France

The DOC imposed an antidumping order on imports of French LEU in 2002, that was subject to periodic review 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.

Other Trade Actions

On January 16, 2018, two U.S. mining companies submitted a request to the DOC to investigate the impact of uranium imports on national security under Section 232 of the Trade Expansion Act of 1962. In the petition, these companies proposed, as a remedy, that the President (1) impose quotas on imports that will ensure that 25% of the U.S. market is reserved to newly-produced U.S. uranium and (2) adopt a "Buy American" preference for purchases of all forms of uranium by U.S. agencies, including U.S. government corporations, such as the Tennessee Valley Authority. By statute, the investigation should have been completed within 270 days after the investigation is initiated, with up to an additional 90 days granted for Presidential action after the investigation results are reported to the President.

Along with a number of other U.S. and foreign companies that potentially could be affected by the proposed remedy, we have participated vigorously in this Section 232 proceeding. In January 2019, the DOC issued a detailed questionnaire to a number of companies, including Centrus, to obtain information about their sales, imports, production and other matters, for the purposes of preparing a report to the President, including recommendations regarding possible actions to take. The DOC is expected to conclude its investigation in April 2019.

The outcome of a national security investigation of uranium imports is unknown. Even if the DOC found that imports threatened national security, the President would not be obligated to grant the remedies requested by the mining companies but could choose to grant other remedies or to impose no remedies at all. Nonetheless, if the remedies requested by the mining companies were granted, the remedies could create additional barriers to imports or sales of non-U.S. uranium, including our imports and sales of enriched uranium and its components.

DOE Facilities

We produced LEU through May 2013 at the Paducah Gaseous Diffusion Plant ("Paducah GDP") in Paducah, Kentucky which we had leased from DOE. We then repackaged and transferred our existing inventory to 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 Gaseous Diffusion Plant ("Portsmouth GDP") in Piketon, Ohio, 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 approximately 40 years prior to our privatization in 1998. As a result of such operation, there are contamination and other potential environmental liabilities associated with 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.

We continue to lease the portion of the DOE facility in Piketon, Ohio, that was formerly used to demonstrate the American Centrifuge technology. We commenced with D&D of the demonstration cascade in the Piketon facility in accordance with U.S. Nuclear Regulatory Commission ("NRC") requirements in 2016. We believe the D&D work required under NRC license requirements has been completed. At the conclusion of the Piketon facility lease on June 30, 2019, absent mutual agreement between the Company and DOE regarding other possible uses for the facility, we are obligated to return the facility to DOE in a condition that meets NRC requirements and in the same condition as the facility was in when it was leased to us (other than due to normal wear and tear). By the conclusion of the lease term, we must remove all Company-owned capital improvements, unless otherwise consented to by DOE, by the conclusion of the lease term.

As discussed above, on January 7, 2019, DOE issued a Notice of Intent to contract with Centrus to deploy a cascade of centrifuges to demonstrate the ability to produce HALEU suitable for a range of military and civilian applications including fueling advanced reactors currently under development. The cascade of centrifuge machines would be deployed at the Piketon facility whereby we would maintain our lease and NRC license for at least the term of the associated contract.

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 will remove and dispose of government owned materials and equipment in order to render the facility non-contaminated and unclassified. The work to be performed is expected to be completed by September 30, 2019. The contract is a cost-plus fixed fee contract totaling approximately $15 million. The contract is incrementally funded and subject to appropriations by the federal government.

Employees

A summary of our employees by location follows:

	No. of Employees at December 31,	
Location	**2018**	**2017**
Oak Ridge, TN	105	106
Piketon, OH	65	123
Bethesda, MD	51	53
Other	5	8
Total Employees	226	290

On March 16, 2017, members of the United Steelworkers (“USW”) Local 689 ratified a new collective bargaining agreement for the 20 employees represented by the USW at the advanced technology facility in Piketon. The contract term is through January 19, 2020.

For details concerning ongoing workforce reductions in connection with the conclusion of the federally funded advanced technology demonstration effort in Piketon, Ohio, refer to Part II, Item 7, *Management’s Discussion and Analysis of Financial Condition and Results of Operations*.

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 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.

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 and Orano and other sources to meet our obligations to customers. We are acquiring alternative sources of supply in the market, given the current oversupply. 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 under those 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 sanctions, quotas, duties 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 may be unable to sell all of the LEU purchased under supply agreements for prices that cover our purchase 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 of Russian LEU under the Russian Supply Agreement is determined by a formula that uses a combination of market-related price points and other factors, which may result in prices that are not aligned with the prevailing market prices when those market prices are depressed, or declining, as is currently the case. Pursuant to an existing provision of the Russian Supply Agreement, the pricing formula in the contract was adjusted in 2018 to account for the significant decreases in market prices since 2011. The adjusted pricing formula will apply to SWU purchased by Centrus for delivery in 2019 and beyond. We expect the adjusted pricing formula will lead to a reduction in the price we would pay in future years, but there can be no assurance that an unexpected change in market prices will not occur that could lead to a different result. 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.

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 contracts' terms. Further, in the case of Russian LEU, sales of Russian LEU or SWU are more challenging than sales of non-Russian material. Some of our customers are unable or unwilling to accept Russian LEU. In addition, we may not achieve the anticipated benefits from the Russian Supply Agreement or other agreements to purchase LEU or SWU because of restrictions on U.S. imports of LEU and other uranium products from the country from which the LEU or SWU is sourced. For example, 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. We are also 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. Further, the U.S. quotas on imports of Russian LEU are subject to periodic review by the DOC, which may result in a decrease in availability of quotas to us, and even an extension of quotas to years in which they do not currently apply.

It also is possible that, in lieu of quotas, duties or other restrictions could be applied to imports of LEU or other uranium products. In addition to, or in lieu of, the quotas imposed in 2008 on Russian LEU, quotas, duties and other restrictions could be applied to foreign LEU and other forms of foreign uranium through legislation or at the discretion of the President (for example, as a result of an investigation of uranium now being concluded under Section 232 of the Trade Expansion Act of 1962 that could result in new trade restrictions as early as June 2019). All such quotas, duties and restrictions could affect Centrus' sales of non-U.S. natural uranium or LEU containing non-U.S. uranium, which could adversely affect Centrus' revenues and financial results. For example, it is possible that pursuant to pending negotiations between agencies of the Russian and U.S. governments, the agreement under which quotas are now imposed could be extended beyond their anticipated expiration at the end of 2020.

The LEU that we are committed to purchase and cannot sell for consumption in the United States will have to be sold for consumption by utilities outside the United States. Our ability to sell to those utilities may be limited by policies of foreign governments or regional institutions that seek to restrict the origin of LEU purchased by utilities under their jurisdiction. In addition, foreign utilities who take delivery of imported LEU 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. Such an interruption 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 sanctions or other legal restrictions, customers may be unwilling to agree to purchase or amend contracts to permit delivery of foreign LEU. 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 we are obligated to purchase under the Russian Supply Agreement, the Orano Supply Agreement and other supply agreements. These restrictions could adversely impact our business and our profitability.

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 2018, our ten largest nuclear fuel customers represented approximately 85% of total revenue and our three largest customers represented approximately 52% 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, 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 overstated. 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, 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 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 contracts. Further, some of our customers are facing financial difficulties and may seek modifications to their contracts or seek bankruptcy protection. In addition, we estimate that approximately 4% of our order book as of December 31, 2018, is at risk related to customer financial conditions or operations. 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 seek to exercise contract termination rights or require concessions, which could adversely affect the value of our order book and our prospects.

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

The contract services segment conducts business under various types of contracts, including fixed-price 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 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. Our failure to accurately estimate the resources and time required for fixed-price contracts or our failure to complete our contractual obligations within the time frame and costs committed could result in reduced profits or, in certain cases, a loss for that contract. If the contract is significant, or we encounter issues that affect multiple contracts, cost overruns could have a material adverse effect on our business, financial condition and results of operations.

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

Our contract service segment is focusing on new customers and new industries with which we do not currently do business with 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 develop contract work. Performing and/or bidding on such work could result in our failing to successfully compete for work or underestimating the time, cost and complexity of such work. There can be no assurance that we will successfully identify new business opportunities, 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 federal government awards contracts through a rigorous competitive process and our efforts to obtain future federal contracts may not be successful.

The federal 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 federal 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 federal government and we may have other contractors sharing in any federal 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 federal 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 federal government contracts 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 federal contracts are dependent on government funding, which is generally subject to Congressional appropriations. Our ability to perform under these federal contracts is dependent upon our receiving sufficient funding of and timely payment by contracting governmental entities. There could be reductions or terminations of, or delays in, the government funding. If the contracting governmental agency 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, 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 IT systems are designed to protect this information through the use of classified networks and other procedures. A material network breach in the security of the IT systems 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, it could cause grave damage to the country's national security and to our business. One of the biggest threats to classified 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 our intellectual property. Any event leading to a security breach or loss 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 results of operations.

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 the 8% PIK Toggle Notes due in September 2019, which is currently classified as current debt, as well as 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% PIK Toggle Notes and 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 enrichment 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; and

- we will be required to dedicate a substantial portion of our cash resources to payments on the 8% PIK Toggle Notes, due in September 2019, and 8.25% Notes, due in February 2027, thereby reducing the availability of our cash to fund our operations, capital expenditures and future business opportunities.

If we incur substantial additional indebtedness, the foregoing risks would intensify. Additional information concerning the 8% PIK Toggle Notes and 8.25% Notes including the terms and conditions of the 8% PIK Toggle Notes and 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, United States Enrichment Corporation ("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 cash interest payments on the 8% PIK Toggle Notes and 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, including independent 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.

Previously, one of our Class B stockholders sold a limited number of 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% PIK Toggle Notes, the 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 the 8% PIK Toggle Notes, the 8.25% Notes or the Series B Preferred Stock. The 8% PIK Toggle Notes, 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% PIK Toggle Notes, the 8.25% Notes and the Series B Preferred Stock may not be available. In addition, the trading prices of the 8% PIK Toggle Notes, the 8.25% Notes, and the Series B Preferred Stock will depend on many factors, including prevailing interest rates, the limited trading volume of the 8% PIK Toggle Notes, the 8.25% Notes and the Series B Preferred Stock, 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, 2018, 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 30.5% 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, three Class A stockholders 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 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 federal 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 the recent tax legislation) could negatively impact our ability to recognize any potential benefits from our NOLs or net unrealized built-in losses.

We have identified a material weakness in our internal control over financial reporting, which could, if not remediated, result in a material misstatement of our financial statements.

In connection with management's evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2018, we determined that we did not design and maintain effective controls over the evaluation of arrangements with customers that could result in modification accounting or other impacts for a sales contract. Specifically, we did not maintain effective controls over the determination and assessment of accounting impacts for these arrangements when executed. The material weakness did not result in a material misstatement of our annual or interim financial statements. However, the material weakness could result in a misstatement of the revenue or inventory-related account balances or disclosures that would result in a material misstatement to the annual or interim financial statements which would not be prevented or detected in a timely manner. For additional discussion see Part II, Item 9A, *Controls and Procedures*.

We are evaluating the material weakness and developing a plan of remediation to strengthen our overall internal control over determination and assessment of accounting impacts for these arrangements when executed. If our remediation efforts are insufficient to address the identified material weakness or if additional material weaknesses in internal controls are discovered in the future, we may be unable to timely and accurately record, process, summarize and report our financial results. The occurrence of or failure to remediate a material weakness may adversely affect our reputation and business and the market price of shares of our Class A Common Stock.

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:

- accidents, terrorism or other incidents at nuclear facilities or involving shipments of nuclear materials;
- regulatory actions or changes in regulations by nuclear regulatory bodies;
- decisions by agencies, courts or other bodies under applicable trade laws;
- 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 our business, results of operations and prospects.

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. The events at Fukushima and its aftermath have negatively affected the balance of supply and demand. In addition, reactor operators face competition from low priced natural gas and other alternatives. As a result, since 2013, United States utilities have closed or have announced plans to close 19 reactors and additional reactors have been reported to be at risk of closure. These impacts could continue to grow depending on the length and severity of delays in the restart of reactors, the number of reactors closed or cancellations of deliveries. The longer that this demand is reduced or absent from the market, the greater the cumulative impact on the market. Market prices for our products are near their lowest levels in more than two decades and this trend could continue or worsen. Suppliers whose deliveries are cancelled or delayed due to shutdown reactors or delays in reactor refueling have excess supply available to sell in the market. This has adversely affected our success in selling LEU. These events have created significant uncertainty, and our business, results of operations, and prospects have been and could continue to be adversely affected.

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, and other utilities customers that do not currently need more fuel, we may need to restructure our contracts to give the customers greater flexibility to meet their obligations to us without a material loss in value to us. If deliveries under contracts included in our order book are significantly delayed, modified or canceled because purchases are tied to requirements or because customers seek to limit their obligations under existing contracts, our revenues and earnings may be adversely impacted, with a corresponding impact on our financial condition and prospects.

In addition, China has emerged as a significant enriched uranium producer. Although primarily focused on supplying domestic requirements in China, it has begun to supply LEU to international markets in recent years which may further contribute to the excess supply of LEU in the market.

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.

We could further demobilize or terminate the American Centrifuge project in the future, which could have an adverse effect on our results of operations and liquidity and could trigger termination of the limited, conditional guaranty by Enrichment Corp. of the 8% PIK Toggle Notes.

We lease the Piketon facility from DOE. At the conclusion of the lease on June 30, 2019, absent mutual agreement between the Company and DOE regarding other possible uses for the facility, we are obligated to return the facility to DOE in a condition that meets NRC requirements and in the same condition as the facility was in when it was leased to us (other than due to normal wear and tear). We believe we have completed the D&D work required under NRC license requirements. As of December 31, 2018, we continue to incur costs in connection with maintaining the lease facilities in accordance with the lease. If remaining costs related to maintaining the facility are greater than our estimates, then such increased costs could have an adverse impact on our results of operations and liquidity.

On January 7, 2019, DOE issued a Notice of Intent to contract with Centrus to deploy a cascade of centrifuges at the Piketon facility to demonstrate the ability to produce HALEU. The associated contract is being definitized with DOE, and the Company anticipates it will extend its lease beyond June 30, 2019, for at least the term of the associated contract. In the event the Company does not terminate the NRC license for the test facility and/or the lease because it expects to receive a contract with DOE, but the Company does not receive the contract, the Company could incur substantial additional costs that could have an adverse impact on our results of operations and liquidity.

While we are working to obtain additional revenue sources to support and expand our technology capabilities at our facilities in Oak Ridge and Piketon, there can be no assurance that such efforts will succeed. If funding by DOE is not obtained or we are unsuccessful in obtaining other revenue to support our technology, our results of operations and liquidity could be adversely affected by potential impacts, including, but not limited to:

- implementing worker layoffs and potentially losing additional key skilled personnel, all of whom have security clearances, which could be difficult to rehire or replace, and incurring severance and other termination costs; and
- terminating the remaining portions of the American Centrifuge project and losing technical capabilities and key resources that could be useful in deploying a future commercial enrichment plant using the American Centrifuge technology or other technologies or expanding into other areas of the nuclear industry.

Termination of the American Centrifuge project or termination of DOE funding of the project through the contract with UT-Battelle, as operator of ORNL for DOE, could trigger termination of the limited, conditional guaranty by Enrichment Corp. of the 8% PIK Toggle Notes (other than with respect to the unconditional interest claim) as provided in the indenture governing the 8% PIK Toggle Notes. DOE funding of the project through the contract with UT-Battelle expired September 30, 2018, and we continue to perform work towards the expected milestones as the parties work toward a successor agreement; however, we have no assurance that a successor agreement will be executed. In the event government funding is not received or is reduced from prior levels, the American Centrifuge project may be subject to demobilization, costs, delays or termination.

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. DOE consented to the assumption by the Company 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 as part of the Company’s Chapter 11 bankruptcy process. 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.

DOE may seek to exercise remedies under such agreements 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 Plant and the ability to finance and successfully deploy the project. Any of these actions could have an adverse impact on our business and prospects.

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. 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 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, any 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 the business, including:

- leases for the centrifuge facilities;
- the 2002 DOE-USEC Agreement and other agreements that address issues relating to the domestic uranium enrichment industry and centrifuge technology; and
- the agreement with DOE to provide D&D services for DOE's K-1600 facility located at the East Tennessee Technology Park.

Termination, expiration or failure to obtain one or more of these agreements, without replacement with an equivalent agreement or arrangement that accomplishes the same objectives as such 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, 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. 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.

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 integrity policies and procedures, including those relating to financial reporting and environmental health and safety. Government and regulatory risk includes the risk that the government or regulatory actions will impose additional cost on us or cause us to have to change our business models or practices.

Our operations are highly regulated by the NRC, DOE and the State of Tennessee.

Our operations are subject to regulation by the 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. Unless we receive a new contract from DOE for the development of HALEU, it is our intention to terminate the NRC license for the test facility in 2019. The NRC could refuse to terminate the license if we have failed to meet the conditions for termination.

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, the centrifuge technology development and manufacturing facilities in Oak Ridge, and certain operations at our other facilities, 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.

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 plant 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 at the centrifuge facilities in Piketon, Ohio and Oak Ridge, Tennessee. 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 LEU.

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.

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.

The terms of our outstanding 8% PIK Toggle Notes, 8.25% Notes and Series B Preferred Stock contain restrictions on our ability to pay dividends on our Class A Common Stock.

Our Series B Preferred Stock provides that we may not pay dividends on our Class A Common Stock (other than dividends payable in shares of Class A Common Stock) so long as any share of our Series B Preferred Stock are outstanding. Although we may redeem or repurchase our Series B Preferred Stock, we currently have no plans to do so, and we cannot assure you that we would redeem or repurchase our Series B Preferred Stock in the future. In addition, the indentures governing our 8% PIK Toggle Notes and 8.25% Notes, subject to certain exceptions, place certain restrictions on the ability of our subsidiary, 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.

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, in April 2016, we adopted a Section 382 Shareholder Rights Agreement (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.

In addition, the indenture governing our 8% PIK Toggle Notes and the indenture governing our 8.25% Notes include restrictions on our ability to engage in certain mergers or acquisitions. The indentures governing our 8% PIK Toggle Notes and our 8.25% Notes also require 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 lease 50,400 square feet of centrifuge testing facilities from DOE at the East Tennessee Technology Park, 2010 Hwy 58, Oak Ridge, Tennessee 37830. The current lease term is through December 2019. 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***

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. As noted in Part I, Item 1A, *Risk Factors*, Centrus has potential pension plan funding obligations under Section 4062(e) of ERISA related to the Company’s de-lease of the former Portsmouth GDP and transition of employees to DOE’s D&D contractor and related to the transition of employees in connection with the Paducah GDP transition. 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. The parties filed cross motions for partial summary judgment to seek a judicial determination of two issues related to the calculation of the pension liability and the entitlement of Centrus to reimbursement for postretirement benefit costs. The Court ruled on the pension calculation methodology and ruled Centrus was entitled to recover costs associated with postretirement benefits for employees afforded protection under the USEC Privatization Act. The parties are engaged in settlement discussions and further action on the case is stayed pending the outcome of such discussions.

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”) in the amount of approximately $314.0 million. 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 FENOC and FENG 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.

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.

Executive Officers of the Registrant

Executive officers are elected by and serve at the discretion of the Board of Directors. Executive officers at April 1, 2019, follow:

Name	Age	Position
Daniel B. Poneman	63	President and Chief Executive Officer
Larry B. Cutlip	59	Senior Vice President, Field Operations
Elmer W. Dyke	55	Senior Vice President, Business Operations and Chief Commercial Officer
Marian K. Davis	60	Senior Vice President, Chief Financial Officer and Treasurer
Stephen S. Greene	61	Senior Vice President, Corporate Development and Strategy
Dennis J. Scott	59	Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary
John M.A. Donelson	54	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.

Marian K. Davis has been Senior Vice President, Chief Financial Officer and Treasurer since April 3, 2018, was Vice President, Finance and Accounting from January 2018 to April 2018 and was Vice President and Chief Audit Executive from July 2011 through December 31, 2017.

Stephen S. Greene has been Senior Vice President, Corporate Development and Strategy since April 3, 2018, was Senior Vice President, Chief Financial Officer and Treasurer from July 2015 to April 2018, and was Vice President, Finance and Treasurer from February 2007 to July 2015.

Dennis J. Scott has been Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary since January 2018 and 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.

John M.A. Donelson has been Vice President, Sales and Chief Marketing Officer since January 2018 and Vice President, Marketing, Sales and Power from April 2011 through December 2017. Mr. Donelson was 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.

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"). The Company has issued 9,437,389 shares of Common Stock, consisting of 8,031,307 shares of Class A Common Stock and 1,406,082 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 596,000 shares were available for future awards as of December 31, 2018, 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 1, 2019, there were 8,031,307 shares of Class A Common Stock outstanding. As of March 1, 2019, there were approximately 930 holders of record and approximately 7,550 beneficial owners of the Company's Class A Common Stock.

No cash dividends were paid in 2017 or 2018, 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 indentures governing our 8% PIK Toggle Notes and 8.25% Notes, subject to certain exceptions, place certain restrictions on the ability of our subsidiary, 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, 2018, 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, 2018 or 2017.

Fourth Quarter 2018 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.

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”, 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: low-enriched uranium (“LEU”), which supplies various components of nuclear fuel to utilities, and contract services, which provides advanced engineering, design, and manufacturing services to government and private sector customers.

Our LEU segment involves the sale of low-enriched uranium, 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 contract services 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, 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 and manufacturing advanced nuclear fuels and technologies 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. Based on our experience at our uranium enrichment facilities, we are also performing decontamination and decommissioning (“D&D”) work for the U.S. government in Oak Ridge, Tennessee.

With several decades of experience in enrichment, we also 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. To support U.S. energy and national security, we have been performing research and demonstration work on our advanced gas centrifuge uranium enrichment technology through contracts with UT-Battelle, LLC (“UT-Battelle”), the management and operating contractor of Oak Ridge National Laboratory (“ORNL”) for the United States Department of Energy (“DOE”).

On January 7, 2019, DOE issued a Notice of Intent to contract with Centrus to deploy a cascade of centrifuges to demonstrate the ability to produce high assay, low-enriched uranium ("HALEU"), suitable for a range of military and civilian applications. While existing reactors currently in operation typically operate on LEU enriched so that the uranium-235 isotope concentration is just below 5%, HALEU has a uranium-235 concentration of up to 20%. HALEU is not commercially available today, but may be required in the future for a number of advanced reactor designs currently under development, for DOE nonproliferation efforts, or for some advanced fuel designs that may be suitable in the future for existing 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. Additionally, while Centrus has begun contract discussions with DOE about the proposed demonstration project, there is no assurance that a contract will be executed or that the project will go forward.

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 seven years following the 2011 Fukushima accident, the published market prices for uranium enrichment declined more than 75 percent. While the monthly price indicators have gradually increased starting in September 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. 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

In March 2011, an earthquake and tsunami caused irreparable damage to four reactors in Fukushima, Japan. 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 within the next few years, supply and demand dynamics for nuclear fuel continue to be depressed. In addition, low natural gas prices and an increase in outputs from renewable sources have put financial pressure on some reactor operators in the United States; six reactors have been shut down in recent years and several more face the prospect of premature shut down in the next few years. The United States remains the largest market in the world for nuclear fuel, with 98 commercial reactors in operation today.

Although the market for the uranium enrichment sector for nuclear fuel is expected to remain oversupplied for the remainder of this decade and into the 2020s, the market is expected to grow as the nuclear power industry expands around the world. According to the World Nuclear Association ("WNA"), there are 55 reactors under construction and 126 firmly planned around the world, compared to 450 currently in operation. This includes growth in China, Russia, and India. The new reactor builds will have the potential to improve market conditions in the long-term.

The enrichment 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. As of December 31, 2018, our order book of sales under contract in the LEU segment was $1.0 billion. While new sales booked in recent years reflect the historically low prices prevalent in today's market, certain contracts included in the order book have sales prices that are significantly above current market prices. We estimate that approximately 4% of our order book as of December 31, 2018, is at risk related to customer financial conditions or operations.

Revenue

We have two reportable segments: the LEU segment and the contract services 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 contract services segment reflects our technical, manufacturing and engineering 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.

SWU and Uranium Sales

Revenue from our LEU segment accounted for approximately 85% of our total revenue in 2018. The majority of our customers are domestic and international utilities that operate nuclear power plants, with international sales constituting approximately 31% 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 (or the SWU and uranium components of LEU) from us. Our agreements for natural uranium sales are generally shorter-term, fixed-commitment contracts.

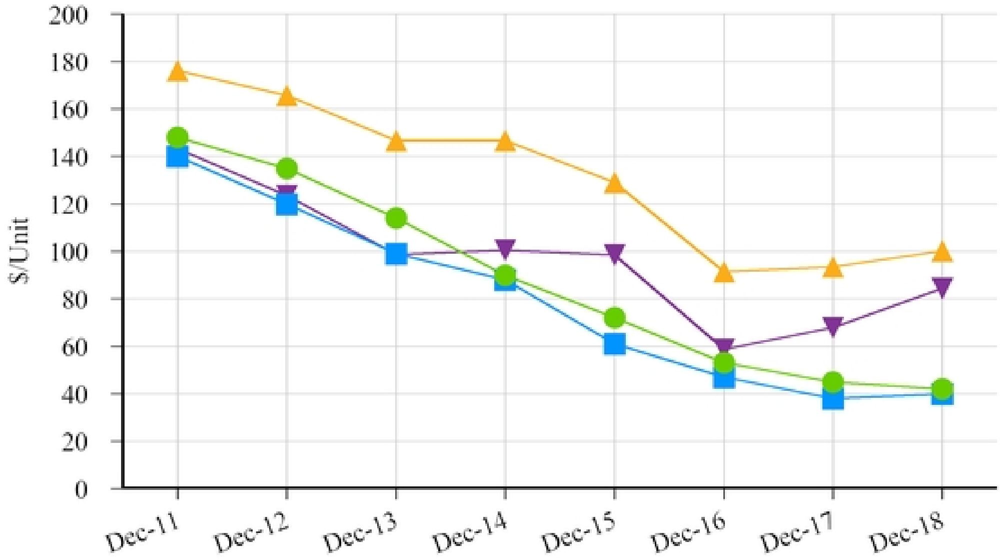
Our revenues, operating results and cash flows can fluctuate significantly from quarter to quarter and year to year. Revenue is recognized at the time LEU or uranium is delivered under the terms of our contracts. The timing of customer demand is affected by, among other things, electricity markets, reactor 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.

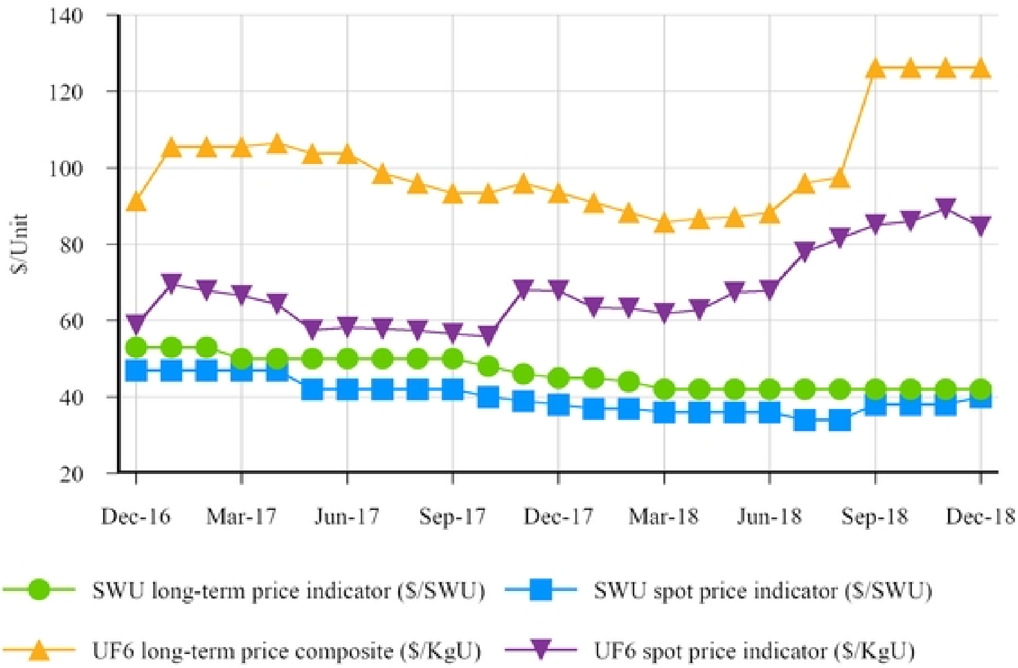
Utility customers in general have the option to defer receipt of LEU or uranium purchased from Centrus beyond the contractual sale period, resulting in the deferral of costs and revenue recognition. Refer to *Note 2, Revenue and Contracts with Customers,* in the consolidated financial statements for 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, which means that average prices under contract today exceed 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, the long-term price for natural uranium hexafluoride ("UF6"), as calculated by Centrus using indicators published in *Nuclear Market Review,* and TradeTech's spot price indicator for UF6:

SWU and Uranium Market Price Indicators*

SEVEN-YEAR VIEW





TWO-YEAR MONTHLY VIEW

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

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 April 2018, we entered into an agreement with Orano Cycle (formerly, AREVA NC) ("Orano") for the long-term supply of SWU. We may elect to begin deliveries as early as 2021. Purchases 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.

Contract Services

Our contract services segment reflects our technical, manufacturing, and engineering 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. 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

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 advancing the next generation of uranium enrichment technology. We are exploring a number of options for returning to domestic production in the future.

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 recently completed contract with UT-Battelle was for the period from October 1, 2017, through September 30, 2018, and generated total revenue of approximately $16.0 million upon completion of defined milestones. These contracts have been funded incrementally. Funding for the American Centrifuge program was provided to UT-Battelle by the federal government. Our previous contract with UT-Battelle was for the period from October 1, 2016, through September 30, 2017, and generated revenue of approximately $25.0 million. Although the most recent contract expired September 30, 2018, we continue to perform work towards the expected milestones as the parties work toward a successor agreement. However, we have no assurance that a successor agreement will be executed.

On September 27, 2018, we leveraged our D&D experience and 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 will remove and dispose of government owned materials and equipment in order to render the facility non-contaminated and unclassified. The work to be performed is expected to be completed by September 30, 2019. The contract is a cost-plus fixed fee contract totaling approximately $15 million. The contract is incrementally funded and subject to appropriations by the federal government.

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

American Centrifuge expenses that are outside of our work for UT-Battelle are included in *Advanced Technology License and Decommissioning Costs* on the consolidated statement of operations, including ongoing costs for work related to the U.S. Nuclear Regulatory Commission ("NRC") license and the DOE lease for the Piketon facility. The lease expires on June 30, 2019, absent any mutual agreement between us and DOE regarding other possible uses for the Piketon facility such as deploying a demonstration cascade for HALEU production. Centrus commenced the D&D of the Piketon demonstration facility in 2016, and we believe the D&D work required under NRC license requirements has been completed. As of December 31, 2018, we have remaining accrued liabilities of $1.6 million for lease turnover obligations and $3.2 million for termination benefits related to the Piketon facility. In addition, we anticipate incurring expenses of approximately $6 million in the first half of 2019 to continue to maintain the lease facilities in accordance with the lease.

Commercial Contracting

On March 26, 2018, we entered into a services agreement with X Energy, LLC ("X-energy"). Under the terms of the services agreement, we provided (i) technical and resource support to X-energy 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 to X-energy subject to a cooperative agreement between X-energy and the U.S. government. The technical and resource support provided by us to X-energy was performed pursuant to separate task orders issued under and pursuant to the services agreement. The initial task orders ran through December 31, 2018. Depending upon the pricing outlined in the task orders, payment for work performed by us pursuant to the services agreement was either fixed price based or time-and-materials based. The initial task orders in 2018 provided for time-and-materials based pricing with payments to us totaling approximately $4.4 million. In addition, we contributed non-cash in-kind contributions with a value of approximately $2.5 million.

On November 29, 2018, we entered into a second services agreement with X-energy. Under the terms of the second services agreement, we will provide (i) technical and resource support to the design and license application development of X-energy's nuclear fuel production facility and (ii) non-cash in-kind contributions to X-energy subject to a cooperative agreement between X-energy and the United States government. The technical and resource support provided by us to X-energy will be performed pursuant to separate task orders issued under and pursuant to the second services agreement. The initial task orders run through September 30, 2019 with deliverables to be completed through November 30, 2019. The awarding of any additional task orders to us will be dependent upon the receipt of additional funding. Depending upon the pricing outlined in the task orders, payment for work performed by us pursuant to the services agreement will either be fixed-price based or time-and-materials based. The initial task orders provide for time-and-materials based pricing with payments to be made to us totaling approximately $4.2 million. In addition, we have agreed to provide non-cash in-kind contributions with a value of approximately $2.4 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 and Paducah Gaseous Diffusion Plants. On January 11, 2018, we entered into a settlement agreement with DOE and the U.S. government regarding breach of contract claims relating to this work. Refer to *Note 2, Revenue and Contracts with Customers.*

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 revenue 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 I, Item 3, *Legal Proceedings*, for additional information.

2019 Outlook

We anticipate 2019 SWU and uranium revenue to be in the range of $85 million to $120 million and total revenue to be in a range of $125 million to $160 million. Consistent with prior years, revenue continues to be most heavily weighted to the second half of the year. We expect to end 2019 with a cash and cash equivalents balance in a range of $120 million to $140 million.

Our financial guidance is subject to a number of assumptions and uncertainties that could affect results either positively or negatively. Variations from our expectations could cause differences between our guidance and our ultimate results. Among the factors that could affect our results are:

- Additional purchases or sales of SWU and uranium;
- Conditions in the LEU and energy markets, including pricing, demand, operations, and regulations
- Timing of customer orders, related deliveries, and purchases of LEU or components;
- Timing of execution of letter agreement for HALEU and terms established in a definitized contract;
- Financial market conditions and other factors that may affect pension and benefit liabilities and the value of related assets
- The outcome of legal proceedings and other contingencies;
- Potential use of cash for strategic initiatives;
- Actions taken by customers, including actions that might affect existing contracts, as a result of market and other conditions impacting Centrus' customers and the industry; and
- Timing of return of cash collateral supporting financial assurance for the Piketon facility.

See also "*Forward Looking Statements*" earlier in this report for additional information.

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:

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. The aggregate net balance of identifiable intangible assets was $76.0 million as of December 31, 2018.

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 requires 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. For the year ended December 31, 2017, components of retirement benefit expense/income other than service cost were reclassified from *Cost of Sales* in the LEU segment and *Selling, General and Administrative* expense to conform with the current presentation.

We recognized $17.3 million of net actuarial losses in 2018 compared to net actuarial gains of $25.8 million in 2017 related to our retiree benefit plans. In 2018, major U.S. stock indices posted their largest annual losses since 2008. The net loss in 2018 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. In 2017, 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 and changes in retiree benefits. The changes in retiree benefits as of December 31, 2017, are not treated as prior service cost as they are attributed to a settlement with a collective bargaining unit and are recognized in *Nonoperating Components of Net Periodic Benefit Expense (Income)* in 2017. Refer to *Note 11, Pension and Postretirement Health and Life Benefits*, of the consolidated financial statements.

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 6.8% for 2019. 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 $2.6 million in 2019. However, the net impact of any changes in the expected return on benefit plan assets on the final benefit cost recognized for fiscal year 2019 would be $0 since the actual return on assets would effectively be reflected at December 31, 2019, 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 4.3% were used as of December 31, 2018. A one-half percentage point reduction in the discount rate would increase the valuation of pension benefit obligations by $41.2 million and postretirement health and life benefit obligations by $2.6 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 $0.1 million, respectively.

- The healthcare costs trend rates are 6.0% projected in 2019 reducing to a final trend rate of 5% by 2021. 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 $2.9 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, and Centrus filed a complaint with 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 revenue 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, 2018, the liability for unrecognized tax benefits, included in *Other Long-Term Liabilities*, was $0.2 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, 2018, the valuation allowance against net deferred taxes was $456.6 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 if it generates taxable income in the future. 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 will reassess the realization of the deferred tax assets each reporting period. To the extent that the financial results improve and the deferred tax assets become realizable, we will reduce the valuation allowance accordingly.

The Tax Cut and Jobs Act of 2017 (the “Tax Act”) contains several significant changes to the Internal Revenue Code of 1986, as amended (the “Code”). The change in tax law required us to remeasure existing net deferred tax assets resulting in a 2017 deferred income tax expense of $288.9 million, fully offset by a valuation allowance and no net impact to the income tax provision for the year.

The following provisions in the Tax Act impact our federal income taxes starting in 2018:

- The federal corporate income tax rate is 21%;
- Federal NOLs originating after 2017 are limited to 80% of taxable income computed without regard to the NOL deduction and will have an indefinite carryforward period;
- The deduction for business interest expense is limited to 1) business interest income, plus 2) 30% of the taxpayer's taxable income without regard to net interest expense, depreciation and amortization, and the NOL deduction. Any business interest expense that is not deductible can be carried forward indefinitely and is treated as an item of pre-change loss subject to the annual limitation under Section 382 of the Code if there is an ownership change; and
- Revenue associated with advanced payments is accelerated.

Based on our available NOLs, the impact to our federal income taxes is currently not material. However, if we have a tax ownership change under Section 382 of the Code, our ability to utilize existing NOLs will be significantly limited.

Results of Operations

Overview

Declining prices in the enrichment market - which reached a historic low in August - were the biggest driver in our losses for the year. A greater proportion of our sales in 2018 were made under contracts signed since market prices began to fall, both because of the natural evolution of our order book and because of the specific deliveries made during the year, but our cost of sales in 2018 - which is calculated on a rolling average - was still based on legacy prices that predated the fall. While spot market prices have risen more than 25 percent since August, our supply costs are lower starting in 2019 due to the price adjustment in our Russian supply agreement as well as other low-cost supply we have secured. Centrus anticipates a return to profitability in 2020 as the impact of lower supply costs become more fully reflected in our results.

Basis of Presentation

On January 1, 2018, we adopted several new accounting standards and certain prior period amounts have been recast to conform with the current presentation. For the adoption of the new revenue standard using the modified retrospective method, results for reporting periods beginning after January 1, 2018, are presented under the new guidance, while prior period amounts are not adjusted and continue to be reported in accordance with the previous guidance. Refer to *Note 1, Summary of Significant Accounting Policies*, to the consolidated financial statements for further details.

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,			
	2018	2017	$ Change	% Change
LEU segment				
Revenue:				
SWU revenue	$ 130.6	$ 195.4	$ (64.8)	(33)%
Uranium revenue	33.8	—	33.8	–
Total	**164.4**	**195.4**	**(31.0)**	(16)%
Cost of sales	187.7	162.7	(25.0)	(15)%
Gross profit (loss)	**$ (23.3)**	**$ 32.7**	**$ (56.0)**	
Contract services segment				
Revenue	$ 28.6	$ 23.0	$ 5.6	24 %
Cost of sales	23.2	25.5	2.3	9 %
Gross profit (loss)	**$ 5.4**	**$ (2.5)**	**$ 7.9**	
Total				
Revenue	$ 193.0	$ 218.4	$ (25.4)	(12)%
Cost of sales	210.9	188.2	(22.7)	(12)%
Gross profit (loss)	**$ (17.9)**	**$ 30.2**	**$ (48.1)**	

Revenue

Revenue from the LEU segment declined $31.0 million (or 16%) in 2018 compared to 2017. Revenue for 2018 included uranium revenue of $33.8 million, with no uranium revenue in the corresponding prior period. The volume of SWU sales increased 24% primarily due to increased short-term sales and the variability in timing of utility customer orders. The average price billed to customers for sales of SWU declined 46% primarily reflecting the trend of lower SWU market prices in recent years and the particular contracts under which SWU were sold during the periods.

Revenue from the Contract Service segment increased $5.6 million (or 24%) in 2018 compared to 2017 primarily reflecting services provided under the X-energy contract beginning in the second quarter of 2018, partially offset by the reduced scope of work under the contract with UT-Battelle in 2018. The increase in 2018 also reflects $9.5 million of revenue related to the January 2018 settlement with DOE related to past work performed.

Cost of Sales

Cost of sales for the LEU segment increased $25.0 million (or 15%) in 2018 compared to 2017, primarily reflecting changes in SWU and uranium sales volumes, partially offset by a decline in the average cost of sales per SWU. In 2018, the average cost of sales per SWU declined approximately 22%. We anticipate our average cost of sales per SWU to decline again in 2019, with further declines in subsequent years, primarily due to lower pricing in new supply contracts and the pricing provisions of existing contracts. Cost of sales includes legacy costs of $3.4 million in each of 2018 and 2017 related to former employees of the Portsmouth and Paducah Gaseous Diffusion Plants.

Cost of sales for the contract services segment declined $2.3 million (or 9%) in 2018 compared to 2017, reflecting the reduced scope of work under the contract with UT-Battelle in 2018, partially offset by costs for services provided under the X-energy contract beginning in the second quarter of 2018.

Gross Profit (Loss)

We realized a gross loss of $17.9 million in 2018, a decline of $48.1 million compared to the gross profit of $30.2 million in 2017. Excluding the $9.5 million of revenue in the current period from the January 2018 settlement with DOE related to past work performed, we realized a gross loss in 2018, of $27.4 million.

The gross loss for the LEU segment was $23.3 million in 2018 compared to a gross profit of $32.7 million in 2017. The decline of $56.0 million was primarily due to the decline in the average price billed to customers for sales of SWU. SWU sales in 2018 reflect a greater concentration of sales made under contracts that reflect lower prices under more recent market conditions.

For the contract services segment, we realized a gross profit of $5.4 million in 2018, including $9.5 million of revenue from the January 2018 settlement with DOE, compared to a gross loss of $2.5 million in 2017. Gross losses are primarily due to costs incurred which are greater than the revenue under the contracts with UT-Battelle and X-energy. We continue to invest in the contract services segment because of the potential for future growth into new areas of business for the company, while also preserving our unique workforce at the Technology and Manufacturing Center in Oak Ridge, Tennessee. Our near-term goal is to make the segment profitable.

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, 2018	Year Ended December 31, 2017	$ Change	% Change
Gross profit (loss)	**$ (17.9)**	**30.2**	**$ (48.1)**	
Advanced technology license and decommissioning costs	26.1	15.7	(10.4)	(66)%
Selling, general and administrative	39.9	43.7	3.8	9 %
Amortization of intangible assets	6.6	10.6	4.0	38 %
Special charges for workforce reductions and advisory costs	2.2	9.5	7.3	77 %
Gains on sales of assets	(0.3)	(4.6)	(4.3)	(93)%
Operating loss	(92.4)	(44.7)	(47.7)	107 %
Gain on early extinguishment of debt	(0.5)	(33.6)	(33.1)	(99)%
Nonoperating components of net periodic benefit expense (income)	10.6	(27.2)	(37.8)	139 %
Interest expense	4.1	5.3	1.2	23 %
Investment income	(2.5)	(1.3)	1.2	92 %
Income (loss) before income taxes	**(104.1)**	**12.1**	**(116.2)**	
Income tax benefit	—	(0.1)	(0.1)	(100)%
Net income (loss)	**(104.1)**	**12.2**	**(116.3)**	
Preferred stock dividends - undeclared and cumulative	7.8	6.9	(0.9)	(13)%
Net income (loss) allocable to common stockholders	**$ (111.9)**	**$ 5.3**	**$ (117.2)**	

Advanced Technology License and Decommissioning Costs

Advanced technology license and decommissioning costs consist of American Centrifuge expenses that are outside of our customer contracts in the contract services segment, including ongoing costs for work at the Piketon facility. Costs increased $10.4 million (or 66%) in 2018 compared to 2017. In the current period, efforts at the Piketon facility were focused on supporting NRC requirements, including working towards elimination of the required financial assurance, and DOE lease turnover activities and the related costs were charged to expense. In addition, a greater allocation of Piketon facility costs was charged to advanced technology license and decommissioning costs in the current period following the relocation of certain corporate functions from the Piketon facility. In the prior period, efforts were primarily focused on D&D of the Piketon facility, and the related costs were recorded as a reduction of the D&D liability. A credit of $5.9 million to advanced technology license and decommissioning costs was recognized in the fourth quarter of 2017 as a result of completing the D&D work using primarily internal resources and less contractor support as well as efficiencies achieved.

Selling, General and Administrative

Selling, general and administrative (“SG&A”) expenses declined $3.8 million (or 9%) in 2018 compared to 2017. Overhead allocated to SG&A expenses declined $2.4 million in 2018, following the relocation of certain corporate functions from the Piketon facility and compensation and benefits declined $0.8 million in 2018. These decreases were partially offset by an increase in consulting costs of $0.6 million in 2018, primarily for work related to business development.

Amortization of Intangible Assets

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, which declined to $6.6 million in 2018 from $10.6 million in 2017. Amortization expense for the intangible asset related to customer relationships is amortized on a straight-line basis.

Special Charges for Workforce Reductions and Advisory Costs

Special charges were $2.2 million in 2018, compared to $9.5 million in 2017, a decline of $7.3 million (or 77%). 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. Special charges for 2017 included estimated employee termination benefits of $3.5 million, less $0.3 million for unvested employee departures and advisory costs of $6.3 million.

Gain on Early Extinguishment of Debt

In the fourth quarter of 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 the 8% PIK Toggle Notes.

In the first quarter of 2017, we recognized a gain of $33.6 million related to the exchange of securities and cash on February 14, 2017, which is net of transaction costs of $9.0 million and previously deferred issuance costs related to the 8% PIK Toggle Notes of $0.4 million. Refer to *Note 9, Debt*, of the consolidated financial statements.

Nonoperating Components of Net Periodic Benefit Expense (Income)

Effective January 1, 2018, a new accounting standard requires components of retirement benefit expense/income other than service cost to be presented below the subtotal for operating income (loss). For the year ended December 31, 2017, $26.6 million of income was reclassified from Cost of Sales in the LEU segment and $0.6 million of income was reclassified from SG&A to conform with the current presentation.

In 2018, major U.S. stock indices posted their largest annual losses since 2008. The net expense in 2018 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. In 2017, 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 and changes in retiree benefits.

Interest Expense

Interest expense declined $1.2 million (or 23%) in 2018, compared to 2017, primarily as a result of the decrease in the outstanding debt balance and the early extinguishment of $6.3 million of the outstanding principal amount of the 8% PIK Toggle Notes on December 6, 2018. No interest expense is recognized on the 8.25% Notes as described in *Note 9, Debt*, of the consolidated financial statements.

Income Tax Benefit

The income tax benefit was less than $0.1 million in 2018 and $0.1 million in 2017, respectively. The income tax benefit in both 2018 and 2017 consists mainly of discrete items for reversals of previously accrued amounts associated with liabilities for unrecognized benefits.

Net Income (Loss)

Our net loss was $104.1 million in 2018, compared to net income of $12.2 million in 2017. The unfavorable variance of $116.3 million was a result of a $37.8 million unfavorable variance in the nonoperating components of net periodic benefit expense (income), a $48.1 million unfavorable variance in the gross loss ($57.6 million excluding the settlement with DOE), a $33.1 million decrease in the gain from the early extinguishment of debt and a $10.4 million increase in advanced technology license and decommissioning costs. These unfavorable variances were partially offset by a $7.3 million decline in special charges and a $3.8 million decline in SG&A expenses.

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 aggregate 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, 2018 and 2017, 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 15, Stockholders' Equity,* of the consolidated financial statements.

Liquidity and Capital Resources

We ended 2018 with a consolidated cash balance of $123.1 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, our operations 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 remainder of this decade before an anticipated rise in uncommitted demand in the 2020s, we continue to seek and make additional sales, including sales for delivery during that time period.

Substantially all revenue-generating operations of the Company are conducted at the subsidiary level. Centrus' principal source of funding for American Centrifuge activities has been provided: (i) under the contract with UT-Battelle for the period October 1, 2017 through September 30, 2018, the operator of ORNL; and (ii) from Centrus' wholly-owned subsidiary, Enrichment Corp. to Centrus and its 100% indirectly owned subsidiary American Centrifuge Operating, LLC pursuant to two secured intercompany financing notes. The financing obtained from Enrichment Corp. funds American Centrifuge activities pending receipt of payments related to work performed under the contract with UT-Battelle, American Centrifuge costs that are outside the scope of work under the contract with UT-Battelle, including D&D and other costs of the Piketon facility, and general corporate expenses, including cash interest payments on our debt. Although the most recent contract with UT-Battelle expired September 30, 2018, we continue to perform work towards the expected milestones as the parties work toward a successor agreement. However, we have no assurance that a successor agreement will be executed.

Capital expenditures are expected to be insignificant for at least the next 12 months.

In February 2016, Centrus completed a successful three-year demonstration of the American Centrifuge technology at its facility in Piketon, Ohio. U.S. government funding for American Centrifuge since October 2015 is now limited to research and development work at our facilities in Oak Ridge, Tennessee. In the event that funding by the U.S. government is further reduced or discontinued, the American Centrifuge project may be subject to further demobilization, costs, delays and termination. Any such actions may have a material adverse impact on our ability to deploy the American Centrifuge technology and on our liquidity.

We have previously provided financial assurance to the NRC for the D&D of the Piketon demonstration facility in the form of surety bonds that are fully cash collateralized by us for $16.3 million. We believe the D&D work required for elimination of financial assurance under NRC license requirements has been completed, and we are working with the NRC to have the surety bonds cancelled, which would permit the Company to receive the cash collateral.

We lease the Piketon facility from DOE. At the conclusion of the lease on June 30, 2019, absent mutual agreement between us and DOE regarding other possible uses for the facility, we are obligated to return the facility to DOE in a condition that meets NRC requirements and in the same condition as the facility was in when it was leased to us (other than due to normal wear and tear). As of December 31, 2018, we have remaining accrued lease turnover obligations of $1.6 million. We have previously provided financial assurance to DOE for the lease turnover obligations in the form of surety bonds that are fully cash collateralized by us for $13.8 million. We expect to receive cash when these surety bonds are reduced and/or cancelled as the Company fulfills its lease turnover obligations.

In addition to remaining lease turnover obligations of $1.6 million and accrued employee termination benefits of $3.2 million related to the Piketon facility, we anticipate incurring expenses of approximately $6 million in the first half of 2019 to continue to maintain the lease facilities in accordance with the lease. If remaining costs related to the Piketon facility are greater than our estimates, then such increased costs could have an adverse impact on our results of operations and liquidity.

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,	
	2018	**2017**
Cash used in operating activities	$ (74.4)	$ (16.1)
Cash provided by investing activities	0.4	4.2
Cash used in financing activities	(11.1)	(40.0)
Decrease in cash, cash equivalents and restricted cash	**$ (85.1)**	**$ (51.9)**

Operating Activities

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.

During 2017, net cash used in operating activities was $16.1 million. American Centrifuge expenditures have been a use of cash, including the significant reduction in the D&D obligation. Sources of cash included the monetization of inventory purchased in prior periods, with inventories declining $44.7 million in 2017. The impact is partially offset by the timing of utility customer payments, with utility customer receivables increasing $27.0 million. The net increase of $19.8 million in the SWU purchase payables balance, due to the timing and quantity of purchase deliveries, was a source of cash in 2017. Net income of $12.2 million in 2017, net of non-cash expenses, was a source of cash.

Investing Activities

There were no significant capital expenditures in 2018 and 2017. Sales of unneeded assets and property yielded net proceeds of $0.5 million and $4.7 million in 2018 and 2017, respectively.

Financing Activities

On December 6, 2018, Centrus entered into Exchange Agreements (the “Exchange Agreements”) with certain holders of the Company’s outstanding 8% paid-in-kind (“PIK”) toggle notes (the “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 15, Stockholders’ Equity* for details related to the Common Stock.

In 2018, the $6.1 million payment of interest classified as debt is classified as a financing activity. Refer to *Note 9, Debt*, of the consolidated financial statements regarding the accounting for the 8.25% Notes.

In February 2017, Centrus exchanged $204.9 million principal amount of the Company’s 8% PIK Toggle Notes for $74.3 million principal amount of 8.25% Notes, 104,574 shares of Series B Preferred Stock and $27.6 million of cash. Refer to *Note 9, Debt* of the consolidated financial statements.

Working Capital

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

	December 31,	
	2018	**2017**
Cash and cash equivalents	$ 123.1	$ 208.8
Accounts receivable	60.2	60.2
Inventories, net	26.7	75.2
Deposits for financial assurance	30.3	16.3
Current debt	(32.8)	(6.1)
Other current assets and liabilities, net	(161.7)	(190.9)
Working capital	**$ 45.8**	**$ 163.5**

Capital Structure and Financial Resources

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.

The principal amount of the 8% PIK Toggle Notes is increased by any payment of interest in the form of PIK payments. We have the option to pay up to 5.5% per annum of interest due on the 8% PIK Toggle Notes in the form of PIK payments. The 8% PIK Toggle Notes are guaranteed and secured on a subordinated, conditional, and limited basis by Enrichment Corp. The 8% PIK Toggle Notes mature on September 30, 2019. However, the maturity date can be extended to September 30, 2024, upon the satisfaction of certain funding conditions described in the applicable indenture relating to the funding, under binding agreements, of (i) the American Centrifuge project or (ii) the implementation and deployment of a National Security Train Program utilizing American Centrifuge technology.

Additional terms and conditions of the 8.25% Notes and the 8% PIK Toggle Notes are described in *Note 9, Debt*, of the consolidated financial statements.

Holders of the Series B Preferred Stock are entitled to cumulative dividends of 7.5% per annum of the Liquidation Preference. 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, 2018, and have not declared, accrued or paid dividends on the Series B Preferred Stock as of December 31, 2018. 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 15, 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 business 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 SWU Purchase Agreements

The Company purchases SWU contained in LEU from Russia supplied to us under a 2011 agreement, as amended, with the Russian government entity Joint Stock Company "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 16, 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 at the ACP and any other facility 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 letters of credit and 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, 2018, or December 31, 2017.

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

As of December 31, 2018, 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 Securities Exchange Act of 1934, as amended (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 not effective due to a material weakness in internal control over financial reporting described below in Management’s Annual Report on Internal Control Over Financial Reporting.

Notwithstanding the material weakness described below, management believes that the consolidated financial statements included in this Annual Report on Form 10-K present fairly, in all material respects, our financial position, results of operations and cash flows as of and for the periods presented in accordance with U.S. GAAP.

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 Rule 13a-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed 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, 2018. 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 a material weakness exists in our internal control over financial reporting as described below. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

We did not design and maintain effective controls over the evaluation of arrangements with customers that could result in modification accounting or other impacts for a sales contract. Specifically, we did not maintain effective controls over the determination and assessment of accounting impacts for these arrangements when executed. The material weakness did not result in a material misstatement of our annual or interim financial statements. However, the material weakness could result in a misstatement of the revenue or inventory-related account balances or disclosures that would result in a material misstatement to the annual or interim financial statements which would not be prevented or detected in a timely manner.

Because of this material weakness, management concluded that we did not maintain effective internal control over financial reporting as of December 31, 2018, based on criteria described in *Internal Control - Integrated Framework* (2013) issued by COSO.

This annual report does not include an audit report of the Company’s independent 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 rules of the Securities and Exchange Commission that permit the Company to provide only management’s report in this annual report.

Remediation Efforts to Address Material Weakness

Management is evaluating the material weakness and developing a plan of remediation to strengthen our overall internal control over determination and assessment of accounting impacts for these arrangements when executed. The remediation plan is expected to include, at a minimum, implementing additional review controls as well as enhancing and formalizing existing processes over these arrangements with customers.

The material weakness will not be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

Changes in Internal Control Over Financial Reporting

There were no changes in internal control over financial reporting during our most recently completed fiscal quarter ended December 31, 2018 that 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, Section 16(a) Beneficial Ownership Reporting Compliance,* and *Board and Committee Membership* in the Company's Proxy Statement for the 2019 annual meeting of stockholders, which will be filed no later than 120 days after December 31, 2018 (the "2019 Proxy Statement"), is incorporated herein by reference.

Item 11. Executive Compensation

Information concerning executive and director compensation appearing under the captions *Executive Compensation,* and *Compensation of Directors* in the 2019 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 2019 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 2019 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 2019 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 2019 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

Exhibit No.	Description
2.1	Plan of Reorganization of USEC Inc. dated July 11, 2014 (incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K, filed with the SEC on September 5, 2014).
3.1	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).
3.2	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)
3.3	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).
3.4	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).
4.1	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).
4.2	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).
4.3	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).
4.4	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).
4.5	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).
4.6	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).
4.7	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).
4.8	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).
4.9	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).

4.10	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).
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).
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 Non-qualified 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 24.b2)
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).
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). (a)
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, 2018, 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.

April 1, 2019

/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 April 1, 2019:

Signature	Title
/s/ Daniel B. Poneman **Daniel B. Poneman**	President and Chief Executive Officer (Principal Executive Officer) and Director
/s/ Marian K. Davis **Marian K. Davis**	Senior Vice President, Chief Financial 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.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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, 2018 and 2017, and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' deficit and of cash flows for each of the two years in the period ended December 31, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America.

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 audit 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
April 1, 2019

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, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 123.1	$ 208.8
Accounts receivable	60.2	60.2
Inventories	129.7	153.1
Deferred costs associated with deferred revenue	134.9	122.3
Deposits for financial assurance	30.3	16.3
Other current assets	6.3	6.2
Total current assets	**484.5**	**566.9**
Property, plant and equipment, net	4.2	4.9
Deposits for financial assurance	6.3	19.7
Intangible assets, net	76.0	82.7
Other long-term assets	0.7	1.1
Total assets	**$ 571.7**	**$ 675.3**
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable and accrued liabilities	$ 52.4	$ 48.2
Payables under SWU purchase agreements	46.0	79.4
Inventories owed to customers and suppliers	103.0	77.9
Deferred revenue and advances from customers	204.5	191.8
Current debt	32.8	6.1
Total current liabilities	**438.7**	**403.4**
Long-term debt	120.2	157.5
Postretirement health and life benefit obligations	136.2	154.2
Pension benefit liabilities	168.9	161.6
Advances from customers	15.0	—
Other long-term liabilities	14.6	17.5
Total liabilities	**893.6**	**894.2**
Commitments and contingencies (Note 16)		
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 $119.3 and $111.5 as of December 31, 2018 and 2017, respectively	4.6	4.6
Class A Common Stock, par value $0.10 per share, 70,000,000 shares authorized, 8,031,307 shares and 7,632,669 shares issued and outstanding as of December 31, 2018 and 2017, respectively	0.8	0.8
Class B Common Stock, par value $0.10 per share, 30,000,000 shares authorized, 1,406,082 shares issued and outstanding as of December 31, 2018 and December 31, 2017	0.1	0.1
Excess of capital over par value	61.2	60.0
Accumulated deficit	(388.5)	(284.5)
Accumulated other comprehensive income, net of tax	(0.1)	0.1
Total stockholders' deficit	**(321.9)**	**(218.9)**
Total liabilities and stockholders' deficit	**$ 571.7**	**$ 675.3**

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

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

	Year Ended December 31,	
	2018	**2017**
Revenue:		
Separative work units	$ 130.6	$ 195.4
Uranium	33.8	—
Contract services	28.6	23.0
Total revenue	**193.0**	**218.4**
Cost of Sales:		
Separative work units and uranium	187.7	162.7
Contract services	23.2	25.5
Total cost of sales	**210.9**	**188.2**
Gross profit (loss)	(17.9)	30.2
Advanced technology license and decommissioning costs	26.1	15.7
Selling, general and administrative	39.9	43.7
Amortization of intangible assets	6.6	10.6
Special charges for workforce reductions and advisory costs	2.2	9.5
Gains on sales of assets	(0.3)	(4.6)
Operating loss	(92.4)	(44.7)
Gain on early extinguishment of debt	(0.5)	(33.6)
Nonoperating components of net periodic benefit expense (income)	10.6	(27.2)
Interest expense	4.1	5.3
Investment income	(2.5)	(1.3)
Income (loss) before income taxes	**(104.1)**	**12.1**
Income tax benefit	—	(0.1)
Net income (loss)	**(104.1)**	**12.2**
Preferred stock dividends - undeclared and cumulative	7.8	6.9
Net income (loss) allocable to common stockholders	**$ (111.9)**	**$ 5.3**
Net income (loss) per common share - basic and diluted	$ (12.23)	$ 0.58
Average number of common shares outstanding - basic and diluted (in thousands)	9,151	9,081

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

CENTRUS ENERGY CORP.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)

	Year Ended December 31,	
	2018	**2017**
Net income (loss)	$ (104.1)	$ 12.2
Other comprehensive loss, before tax (Note 17):		
Amortization of prior service credits, net	(0.2)	(0.1)
Other comprehensive loss, before tax	(0.2)	(0.1)
Income tax benefit related to items of other comprehensive income	—	—
Other comprehensive loss, net of tax benefit	(0.2)	(0.1)
Comprehensive income (loss)	**$ (104.3)**	**$ 12.1**

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,	
	2018	**2017**
Operating Activities:		
Net income (loss)	$ (104.1)	$ 12.2
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	7.4	12.0
Immediate recognition of retirement benefit plans (gains) losses, net	17.3	(25.8)
PIK interest on paid-in-kind toggle notes	1.7	2.9
Gain on early extinguishment of debt	(0.5)	(33.6)
Gain on sales of assets	(0.4)	(4.6)
Changes in operating assets and liabilities:		
Accounts receivable	9.7	(17.6)
Inventories, net	61.0	44.7
Payables under SWU purchase agreements	(33.4)	19.8
Deferred revenue, net of deferred costs	0.1	15.9
Accounts payable and other liabilities	3.7	(25.2)
Pension and postretirement liabilities	(28.0)	(9.6)
Other, net	(8.9)	(7.2)
Cash used in operating activities	**(74.4)**	**(16.1)**
Investing Activities:		
Capital expenditures	(0.1)	(0.5)
Proceeds from sales of assets	0.5	4.7
Cash provided by investing activities	**0.4**	**4.2**
Financing Activities:		
Payment of interest classified as debt	(6.1)	(3.4)
Extinguishment of debt	(5.0)	(27.6)
Payment of securities transaction costs	—	(9.0)
Cash used in financing activities	**(11.1)**	**(40.0)**
Decrease in cash, cash equivalents and restricted cash	(85.1)	(51.9)
Cash, cash equivalents and restricted cash, beginning of period [1]	244.8	296.7
Cash, cash equivalents and restricted cash, end of period [1]	**$ 159.7**	**$ 244.8**
Supplemental cash flow information:		
Interest paid in cash	$ 7.1	$ 4.2
Non-cash activities:		
Conversion of interest payable-in-kind to debt	$ 1.7	$ 0.4
Exchange of debt for Series B preferred stock	$ —	$ 4.6
Exchange of debt for Class A common stock	$ 0.9	$ —

[1] Refer to *Note 4, Cash, Cash Equivalents and Restricted Cash.*

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	Total
Balance at December 31, 2016	$ —	$ 0.8	$ 0.1	$ 59.5	$ (296.7)	$ 0.2	$ (236.1)
Net income	—	—	—	—	12.2	—	12.2
Issuance of preferred stock	4.6	—	—	—	—	—	4.6
Other comprehensive loss, net of tax benefit (Note 17)	—	—	—	—	—	(0.1)	(0.1)
Restricted stock units and stock options issued, net of amortization	—	—	—	0.5	—	—	0.5
Balance at December 31, 2017	**$ 4.6**	**$ 0.8**	**$ 0.1**	**$ 60.0**	**$ (284.5)**	**$ 0.1**	**$ (218.9)**
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 (Note 17)	—	—	—	—	—	(0.2)	(0.2)
Restricted stock units and stock options issued, net of amortization	—	—	—	0.4	—	—	0.4
Balance at December 31, 2018	**$ 4.6**	**$ 0.8**	**$ 0.1**	**$ 61.2**	**$ (388.5)**	**$ (0.1)**	**$ (321.9)**

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.

Correction of Error

In the second quarter of 2018, Management identified a classification error for $0.3 million of costs that had been previously included in *Cost of Sales* for the contract services segment in the consolidated statement of operations for the three months ended March 31, 2018. These costs are now included in *Advanced Technology License and Decommissioning Costs* in the consolidated statement of operations for the year ended December 31, 2018. The Company considered quantitative and qualitative factors in assessing the materiality of the classification error and determined that the classification error was not material. This revision had no impact to the Company’s net loss for the three months ended March 31, 2018, or the year ended December 31, 2018.

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, 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 U^{235} and depleted uranium having a lower percentage of U^{235}. 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' 8.0% paid-in-kind ("PIK") toggle notes (the "8% PIK Toggle Notes") and its 8.25% notes (the "8.25% 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 the trading price nearest the balance sheet date observed on secondary markets. 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 to mitigate the likelihood of such exposure resulting in a loss.

Revenue

On January 1, 2018, the Company adopted ASC 606 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, while comparative financial information has not been adjusted and continues to be reported in accordance with the Company's historical accounting policy for revenue recognition prior to the adoption of ASC 606. There was no material impact of adopting ASC 606 for sales under the LEU segment. For sales under the contract services segment, revenue is now primarily recognized over time as control is transferred to the customer.

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 to the extent 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 LEU or uranium purchased from the Company beyond the contractual sale period. In such cases, title to LEU or uranium is 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 LEU or uranium. The recognition of revenue and related cost of sales occurs at the point in time at which the customer obtains control of LEU 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.

Contract Services Revenue

Revenue for the contract services segment, principally representing engineering and testing activities performed by the Company, as well as technical and resource support, 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. 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 generally uses the cost-to-cost input method of progress for fixed-price contracts 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. 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. For contracts that are not accounted for under the percentage of completion method, the Company records revenue as services are provided. The Company recognizes time-and-material contract revenue at negotiated, fixed, contractually billable rates as it delivers labor hours and incurs other direct expenses.

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 (contract assets) 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 contract services revenue, the Company recognizes a liability included in *Deferred Revenue and Advances from Customers* on the consolidated balance sheet.

Results for prior periods were reported in accordance with ASC 605. Revenue 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 was recognized at the time LEU or uranium was delivered under the terms of contracts with domestic and international electric utility customers. Most customers took title and delivery of LEU at fuel fabricators and revenue was recognized when delivery of LEU to the customer occurred at the fuel fabricator. In cases when utility customers deferred receipt of LEU or uranium purchased from the Company beyond the contractual sale period, title to LEU or uranium was transferred to the customer and risk of loss remained with Centrus until delivery occurred. The recognition of revenue and related cost of sales occurred at the time delivery occurred and risk of loss transferred to the customer. In cases where Centrus accepted payment in the form of uranium, revenue was recognized at the time LEU was delivered and was based on the fair value of the uranium received in exchange for the SWU.

Contract services revenue in prior periods included billings for fees and payments for allowable costs that were determined in accordance with the terms of the underlying contracts. For contracts that provided fixed payments for monthly reports, revenue was recognized as deliverables are completed and as fees are earned. For contracts that provided fixed payments for completion of milestones, revenue was recognized as each milestone is completed.

Advanced Technology License and Decommissioning Costs

American Centrifuge expenses that are outside of our contracts with UT-Battelle are included in *Advanced Technology License and Decommissioning Costs*, including ongoing costs to maintain the demobilized Piketon facility and our licenses from the U.S. Nuclear Regulatory Commission (“NRC”) at that location. Refer to *Note 16, Commitments and Contingencies,* for further details regarding the American Centrifuge project.

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 2014, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers*, which requires revenue to be recognized when a customer obtains control of promised goods and services at an amount that reflects the consideration the Company expects to receive in exchange for those goods and services. In addition, ASU 2014-09 and subsequent amendments, collectively known as Accounting Standards Codification ("ASC") 606 ("ASC 606") require certain additional disclosures regarding the nature, amount, timing, and uncertainty of revenues and cash flows arising from contracts with customers.

The Company adopted ASC 606 on January 1, 2018, using the modified retrospective method. The new standard was applied to contracts that were not completed as of the adoption date. The Company recognized the cumulative effect of initially applying ASC 606 of $0.1 million as an adjustment to the opening balance of accumulated deficit. The comparative information has not been restated and continues to be presented according to accounting standards in effect for those periods. Refer to *Note 2, Revenue and Contracts with Customers*, for additional information.

The following table summarizes the cumulative effect of the changes to the Company's consolidated balance sheet as of January 1, 2018, from the adoption of ASC 606 (in millions):

	Balance at December 31, 2017	Adjustment for ASC 606	Balance at January 1, 2018
Assets:			
Unbilled contract revenue	$ —	$ 0.1	$ 0.1
Stockholders' Deficit:			
Accumulated Deficit	(284.5)	0.1	(284.4)

The following table summarizes the impact of adopting ASC 606 on revenue and net loss for the year ended December 31, 2018 (in millions):

	Year Ended December 31, 2018		
	As Reported	Under Previous Accounting	Effect of Adoption
Revenue	$ 193.0	$ 193.1	$ (0.1)
Net loss	(104.1)	(104.0)	(0.1)

The effect of adoption for the year ended December 31, 2018, includes the opening balance adjustment of $0.1 million.

In March 2017, the FASB issued ASU 2017-07, *Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. ASU 2017-07 requires changes to the presentation of the components of net periodic benefit cost on the statement of operations by requiring service cost to be presented with other employee compensation costs and other components of net periodic benefit cost to be presented outside of any subtotal of operating income. The Company adopted this standard on January 1, 2018, on a retrospective basis for all periods presented, and certain prior period amounts have been recast to conform with the current presentation as follows (in millions):

	Year Ended December 31, 2017		
	As Previously Reported	Adjustments	Current Presentation
Cost of sales - separative work units and uranium	$ 136.1	$ 26.6	$ 162.7
Selling, general and administrative	43.1	0.6	43.7
Nonoperating components of net periodic benefit expense (income)	—	(27.2)	(27.2)

Refer to *Note 11, Pension and Postretirement Health and Life Benefits*, for additional information.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. ASU 2016-15 addresses the presentation and classification of certain cash receipts and cash payments in the statement of cash flows. It is intended to reduce diversity in practice by providing guidance on eight specific cash flow issues. ASU 2016-15 became effective for the Company on January 1, 2018. Upon adoption, the Company reclassified $9.0 million of transaction costs incurred in the first quarter of 2017 related to the note exchange (see *Note 9, Debt*) in the statement of cash flows as follows (in millions):

	Year Ended December 31, 2017		
	As Previously Reported	Adjustments	Current Presentation
Cash used in operating activities	$ (25.1)	$ 9.0	$ (16.1)
Cash used in financing activities	(31.0)	(9.0)	(40.0)

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. ASU 2016-18 requires that the statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. ASU 2016-18 is to be applied retrospectively for each period presented. The Company adopted the new standard on January 1, 2018. Upon adoption, the Company added its restricted cash balances to the consolidated statement of cash flows, and the prior period amounts have been recast to conform with the current presentation.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory,* requiring the recognition of the current and deferred income taxes resulting from an intra-entity transfer of assets other than inventory when the transfer occurs. The Company adopted the new standard on January 1, 2018, on a modified retrospective basis. The adoption of ASU 2016-16 did not have a material impact on the Company’s consolidated financial statements, including the cumulative effect adjustment required upon adoption.

Accounting Standards Effective in Future Periods

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which requires lessees to recognize a right-of-use asset and lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either financing or operating, with classification affecting expense recognition in the statement of operations. The standard is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The new guidance, as amended in July 2018 by ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, requires a transition adoption election using either 1) a modified retrospective approach with periods prior to the adoption date being recast or 2) a prospective adoption approach with a cumulative-effect adjustment recognized to the opening balance of retained earnings on the adoption date with prior periods not recast. The Company is finalizing its evaluation of the impact of adoption and anticipates adopting this standard as of January 1, 2019, using the prospective adoption approach.

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 amendments in ASU 2018-02 are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption of the amendments is permitted. The Company is currently evaluating the effect of the standard on its Consolidated Financial Statements.

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 based on the billing addresses of customers (in millions):

	Year Ended December 31,	
	2018	**2017**
United States	$ 112.7	$ 111.5
Foreign:		
Belgium	35.2	34.9
Japan	3.1	49.0
Other	13.4	—
Revenue - SWU and uranium	**$ 164.4**	**$ 195.4**

Refer to *Note 18, Revenue by Geographic Area, Major Customers and Segment Information* for disaggregation of revenue by segment. Disaggregation by end-market is provided in Note 18 and the consolidated statements of operations. SWU and uranium sales are made primarily to electric utility customers. Contract services revenue resulted primarily from services provided to government contractors and, in the first quarter of 2018, the settlement with DOE and the U.S. government. SWU and uranium revenue is recognized at point of sale and contract services revenue is generally recognized over time.

Contract Balances

The following table represents changes in the Company's contract assets and contract liabilities balances (in millions):

	December 31, 2018	January 1, 2018	Year-To-Date Change
Contract assets			
Accounts receivable:			
Billed	$ 50.4	$ 60.2	$ (9.8)
Uranium feed receivable	9.8	—	9.8
Unbilled contract revenue	—	0.1	(0.1)
Accounts receivable	**$ 60.2**	**$ 60.3**	**$ (0.1)**
Deferred costs associated with deferred revenue	$ 134.9	$ 122.3	$ 12.6
Contract liabilities			
Deferred revenue and advances from customers - current:			
Deferred revenue	$ 204.5	$ 172.5	$ 32.0
Advances from customers	—	19.3	(19.3)
Deferred revenue and advances from customers - current	**$ 204.5**	**$ 191.8**	**$ 12.7**
Advances from customers - noncurrent	$ 15.0	$ —	$ 15.0

Deferred cost and deferred revenue activity for the year ended December 31, 2018, follows (in millions):

	Deferred Sales in the Period	Previously Deferred Sales Recognized in the Period	Year-To-Date Change
Deferred costs associated with deferred revenue	$ 25.4	$ (12.8)	$ 12.6
Deferred revenue	55.3	(23.3)	32.0

In the second quarter of 2018, the Company received uranium valued at $14.5 million from a customer that elected to defer a SWU purchase obligation for a period greater than one year. Under the contract, the customer has not received title to SWU or LEU product from the Company. The liability to the customer is included in *Advances from Customers*, a noncurrent liability. In December 2018, the Company borrowed $7.3 million of SWU from a customer under terms which require repayment within 48 months. The Company recorded the SWU and the related liability for the borrowing using an average purchase price over the borrowing period. The liability to the customer is included in *Other Liabilities*, which is included in noncurrent liabilities.

On January 11, 2018, the Company entered into a settlement agreement with DOE and the U.S. government regarding breach of contract claims relating to work performed by the Company under contracts with DOE and subcontracts with DOE contractors. DOE agreed to settle all claims raised as part of and subsequent to the litigation, except with respect to certain claims for pension and postretirement benefits, for a total of $24.0 million and provide a complete close out of all such contracts and subcontracts settled under the settlement agreement without any further audit or review of the Company's costs or incurred cost submissions. Prior to the settlement, the Company had a receivables balance related to the claims being settled of $14.5 million. In 2018, 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.

Revenue for the contract services segment, principally representing engineering and testing activities performed by the Company, as well as technical and resource support, is recognized over the contractual period as services are rendered. The contract services segment also includes limited services provided by Centrus to the DOE and its contractors at the Piketon site related to facilities the Company leases from DOE. In 2018, revenue for the contract services segment included $9.5 million under a January 2018 settlement agreement with DOE and the U.S. government.

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 revenue 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.

LEU Segment Order Book

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 sales under contract in the LEU segment ("order book") extends to 2030. The order book represents the Company's remaining performance obligations under these contracts and includes the *Deferred Revenue* amounts in the Contract Balances table above. The order book was $1.0 billion as of December 31, 2018, compared to $1.3 billion at December 31, 2017, reflecting completed deliveries and new contracts signed in 2018 and a rejection of a contract by a customer in bankruptcy proceedings. No other adjustments were required to the Company's consolidated financial statements as a result of the contract rejection. Refer to *Note 16, Commitments and Contingencies*, for additional information regarding the customer and claims filed by the Company.

Most of the Company's contracts provide for fixed purchases of SWU during a given year. The Company's estimate of the aggregate dollar amount of future SWU and uranium sales 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 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 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.

Contract Modification

In 2018 the Company entered into an arrangement with a fabricator to facilitate a prior arrangement with a customer that resulted in a modification of its previous SWU sales arrangement with the customer. The product to be delivered under the modified arrangement is distinct and, therefore, the modification is being accounted for on a prospective basis. No revenue was recognized in 2018 from the customer as the distinct product was not delivered. Under the new arrangement, the Company made a payment to the customer of $20.7 million that is a contract asset, which will be recovered as payments are received from the customer for the remaining product delivery. The Company received $21.1 million in December 2018 that is a contract liability and the net of these amounts of $0.4 million is classified as a contract liability as of December 31, 2018, which is included in *Advances from Customers*, a noncurrent liability.

3. SPECIAL CHARGES

For the years ended December 31, 2018 and 2017, special charges totaled $2.2 million and $9.5 million, respectively, including advisory costs of $0.1 million and $6.3 million, respectively. In 2018 and 2017, advisory costs related to updating the Company's information technology systems.

Workforce reductions have resulted from evolving business needs and the completion of the demonstration of American Centrifuge technology at the Company's facility in Piketon, Ohio. Without mutual agreement between Centrus and DOE regarding other possible uses for the Piketon facility, the remaining balance of termination benefits of $3.2 million related to the Piketon facility is expected to be paid in the third quarter of 2019 and is classified in *Accounts Payable and Accrued Liabilities* in the consolidated balance sheet. A summary of termination benefit activity and related liabilities follows (in millions):

		2017			2018		
	Liability Dec. 31, 2016	**Charges for Termination Benefits**	**Paid/ Settled**	**Liability Dec. 31, 2017**	**Charges for Termination Benefits**	**Paid/ Settled**	**Liability Dec. 31, 2018**
Workforce reductions:							
Evolving business needs	$ 0.1	$ 2.4	$ (1.7)	$ 0.8	$ 2.1	$ (2.0)	$ 0.9
Piketon demonstration facility	5.4	1.1	(0.8)	5.7	0.1	(2.6)	3.2
Total	**$ 5.5**	**$ 3.5**	**$ (2.5)**	**$ 6.5**	**$ 2.2**	**$ (4.6)**	**$ 4.1**

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, 2018	**December 31, 2017**
Cash and cash equivalents	$ 123.1	$ 208.8
Deposits for financial assurance - current	30.3	16.3
Deposits for financial assurance - noncurrent	6.3	19.7
Total cash, cash equivalents and restricted cash	**$ 159.7**	**$ 244.8**

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

	December 31, 2018		**December 31, 2017**	
	Current	**Long-Term**	**Current**	**Long-Term**
NRC license	$ 16.3	$ —	$ 16.1	$ —
DOE lease	13.8	—	—	13.5
Workers compensation	—	6.0	—	5.9
Other	0.2	0.3	0.2	0.3
Total deposits for financial assurance	**$ 30.3**	**$ 6.3**	**$ 16.3**	**$ 19.7**

Piketon Facility Obligations and Surety Bonds

Centrus commenced with the decontamination and decommissioning ("D&D") of the Piketon demonstration facility in accordance with the NRC license requirements in 2016. Centrus has previously provided financial assurance to the NRC for the D&D work in the form of surety bonds that are fully cash collateralized by Centrus for $16.3 million. Centrus believes the D&D work required for elimination of financial assurance under NRC license requirements has been completed and is working with the NRC to have the surety bonds cancelled, which would permit the Company to receive the cash collateral.

Centrus leases the Piketon facility from DOE. At the conclusion of the lease on June 30, 2019, absent mutual agreement between Centrus and DOE regarding other possible uses for the facility, Centrus is obligated to return the facility to DOE in a condition that meets NRC license requirements and in the same condition as the facility was in when it was leased to Centrus (other than due to normal wear and tear). Centrus must remove all Company-owned capital improvements at the Piketon facility, unless otherwise consented to by DOE, by the conclusion of the lease term. The estimated cost for these lease termination obligations, included in *Accounts Payable and Accrued Liabilities* on the consolidated balance sheet, is $1.6 million and $0.8 million as of December 31, 2018, and December 31, 2017, respectively. Centrus has previously provided financial assurance to DOE for the lease turnover obligations in the form of surety bonds that are fully cash collateralized by Centrus for $13.8 million. Centrus expects to receive cash when these surety bonds are reduced and/or cancelled as the Company fulfills its lease turnover obligations.

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 the state requirements in the form of a surety bond and a letter of credit that are fully cash collateralized by Centrus for $6.0 million. The surety bond and letter of credit will be cancelled, and the Company expects to receive cash when each state determines the Company has no further workers' compensation obligations.

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 follow (in millions):

	December 31, 2018			December 31, 2017		
	Current Assets	Current Liabilities (a)	Inventories, Net	Current Assets	Current Liabilities (a)	Inventories, Net
Separative work units	$ 20.1	$ 3.6	$ 16.5	$ 47.2	$ 15.0	$ 32.2
Uranium	109.6	99.4	10.2	105.9	62.9	43.0
Total	**$ 129.7**	**$ 103.0**	**$ 26.7**	**$ 153.1**	**$ 77.9**	**$ 75.2**

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

6. PROPERTY, PLANT AND EQUIPMENT

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

	December 31, 2017	Additions / (Depreciation)	Retirements	December 31, 2018
Land	$ 1.2	$ —	$ —	$ 1.2
Leasehold improvements	3.2	—	(0.7)	2.5
Machinery and equipment	1.3	0.1	(0.4)	1.0
Other	1.1	—	—	1.1
Property, plant and equipment, gross	**6.8**	**0.1**	**(1.1)**	**5.8**
Accumulated depreciation	(1.9)	(0.8)	1.1	(1.6)
Property, plant and equipment, net	**$ 4.9**	**$ (0.7)**	**$ —**	**$ 4.2**

Depreciation expense was $0.8 million and $1.4 million for the years ended December 31, 2018 and 2017, respectively.

The Company sold assets and property in 2018 and 2017 related to its operations and the American Centrifuge project that were no longer needed (in millions):

	Year Ended December 31,	
	2018	2017
Sales of assets and property, net of auction fees and other costs	$ 0.4	$ 4.8
Less: net carrying value	—	(0.2)
Gain on sales of assets	**$ 0.4**	**$ 4.6**
Cash proceeds received	**$ 0.5**	**$ 4.7**

Cash proceeds for the years ended December 31, 2018 and 2017 include $0.1 million and $0.2 million, respectively, which were included in *Accounts Receivable* as of December 31 of the prior year.

7. INTANGIBLE ASSETS

Intangible assets originated from the Company’s reorganization and application of fresh start accounting as of the date the Company emerged from bankruptcy, September 30, 2014, 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, 2018			December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Sales order book	$ 54.6	$ 28.0	$ 26.6	$ 54.6	$ 25.9	$ 28.7
Customer relationships	68.9	19.5	49.4	68.9	14.9	54.0
Total	**$ 123.5**	**$ 47.5**	**$ 76.0**	**$ 123.5**	**$ 40.8**	**$ 82.7**

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

2019	$ 5.4
2020	8.0
2021	8.8
2022	9.7
2023	8.3
Thereafter	35.8
Total	**$ 76.0**

8. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

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

	December 31,	
	2018	2017
Trade payables	$ 3.9	$ 6.3
Compensation and employee benefits	21.0	17.4
Postretirement health and life benefit obligations - current	15.4	14.7
Severance	4.1	3.9
Lease turnover obligations	1.6	1.8
Accrued interest on 8% PIK Toggle Notes	0.6	0.2
Other accrued liabilities	5.8	3.9
Total accounts payable and accrued liabilities	**$ 52.4**	**$ 48.2**

9. DEBT

A summary of debt follows (in millions):

		December 31, 2018		December 31, 2017	
	Maturity	Current	Long-Term	Current	Long-Term
8.25% Notes:	Feb. 2027				
Principal		$ —	$ 74.3	$ —	$ 74.3
Interest		6.1	45.9	6.1	52.0
8.25% Notes		**$ 6.1**	**$ 120.2**	**$ 6.1**	**$ 126.3**
8% PIK Toggle Notes	Sep. 2019 [(a)]	$ 26.7	$ —	$ —	$ 31.3
Less deferred issuance costs		—	—	—	0.1
8% PIK Toggle Notes		**$ 26.7**	**$ —**	**$ —**	**$ 31.2**
Total		**$ 32.8**	**$ 120.2**	**$ 6.1**	**$ 157.5**

(a) Maturity can be extended to September 2024 upon the satisfaction of certain funding conditions described in the applicable indenture.

December 6, 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.

February 14, 2017 Note Exchange

On February 14, 2017, pursuant to an exchange offer and consent solicitation, Centrus exchanged $204.9 million principal amount of the Company’s 8% PIK Toggle Notes for $74.3 million principal amount of 8.25% notes due February 2027 (the “8.25% Notes”), 104,574 shares of Series B Preferred Stock with a liquidation preference of $1,000 per share, and $27.6 million of cash. The exchange is accounted for as a troubled debt restructuring under ASC Subtopic 470-60, *Debt-Troubled Debt Restructurings by Debtors*. The Company recognized the 8.25% Notes on the consolidated balance sheet as the sum of the principal balance and all future interest payments and recognized a gain of $33.6 million related to the note exchange for the quarter ended March 31, 2017, which is net of transaction costs of $9.0 million and previously deferred issuance costs related to the 8% PIK Toggle Notes of $0.4 million. Refer to *Note 15, Stockholders’ Equity* for details related to the preferred 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, 2018, and December 31, 2017, $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 liens securing the Enrichment Corp. guarantee of the PIK Toggle Notes and the 8.25% Notes are pari passu with each other, and are 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.

8% PIK Toggle Notes

Interest on the 8% PIK Toggle Notes is 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 is increased by any payment of interest in the form of PIK payments. The Company has the option to pay up to 5.5% per annum of interest due on the 8% PIK Toggle Notes in the form of PIK payments. For the semi-annual interest periods in 2017 and 2018, 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 are being amortized on a straight-line basis, which approximates the effective interest method, over the life of the 8% PIK Toggle Notes. The 8% PIK Toggle Notes mature on September 20, 2019. However, the maturity date may be extended to September 30, 2024, upon the satisfaction of certain funding conditions described in the applicable indenture.

The 8% PIK Toggle Notes mature on September 30, 2019. However, the maturity date can be extended to September 30, 2024, upon the satisfaction of certain funding conditions described in the Indenture relating to the funding, under binding agreements, of (i) the American Centrifuge project or (ii) the implementation and deployment of a National Security Train Program utilizing American Centrifuge technology.

The 8% PIK Toggle Notes rank equally in right of payment with all existing and future unsubordinated indebtedness of the Company (other than the Issuer Senior Debt) and are senior in right of payment to all existing and future subordinated indebtedness of the Company. The 8% PIK Toggle Notes are subordinated in right of payment to the Issuer Senior Debt.

The 8% PIK Toggle Notes are guaranteed and secured on a subordinated, conditional, and limited basis by Enrichment Corp. Enrichment Corp. will be released from its guarantee without the consent of the holders of the 8% PIK Toggle Notes upon the occurrence of certain termination events (other than with respect to an unconditional interest claim), including (i) the involuntary termination by the Pension Benefit Guaranty Corporation ("PBGC") of any of the qualified pension plans of the Company or Enrichment Corp, (ii) the cessation of funding prior to completion of our ongoing American Centrifuge test programs or (iii) both a decision by the Company to abandon American Centrifuge technology and either (1) the efforts by the Company to commercialize another next generation enrichment technology funded at least in part by new capital provided or to be provided by Enrichment Corp. have been terminated or are no longer being pursued or (2) the attainment of capital necessary to commercialize another next generation enrichment technology with respect to which the issuer is involved which does not include new capital provided or to be provided by Enrichment Corp.

The Enrichment Corp. guarantee ranks equally in right of payment with all existing and future unsubordinated indebtedness of Enrichment Corp. (other than the Designated Senior Claims 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 the Designated Senior Claims.

10. 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, 2018				December 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash and cash equivalents	$ 123.1	$ —	$ —	$ 123.1	$ 208.8	$ —	$ —	$ 208.8
Deferred compensation asset (a)	1.4	—	—	1.4	1.4	—	—	1.4
Liabilities:								
Deferred compensation obligation (a)	$ 1.4	$ —	$ —	$ 1.4	$ 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, 2018, and December 31, 2017, 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, 2018		December 31, 2017	
	Carrying Value	Estimated Fair Value [(a)]	Carrying Value	Estimated Fair Value [(a)]
8.25% Notes	$ 126.3 [(b)]	$ 57.9	$ 132.4 [(b)]	$ 61.7
8% PIK Toggle Notes	26.7	21.8	31.3	25.1

[(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*.

11. 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 Year Ended December 31, 2018	Defined Benefit Pension Plans Year Ended December 31, 2017	Postretirement Health and Life Benefit Plans Year Ended December 31, 2018	Postretirement Health and Life Benefit Plans Year Ended December 31, 2017
Changes in Benefit Obligations:				
Obligations at beginning of period	$ 817.9	$ 814.6	$ 170.7	$ 192.8
Actuarial (gains) losses, net	(50.8)	32.8	(13.1)	(24.8)
Service costs	3.4	3.7	—	—
Interest costs	28.7	32.2	5.8	7.2
Benefits paid	(57.5)	(59.3)	(11.8)	(14.5)
Lump sum benefits paid	(4.8)	(2.9)	—	—
Plan change	—	—	—	10.0
Administrative expenses paid	(3.1)	(3.2)	—	—
Obligations at end of period	733.8	817.9	151.6	170.7
Changes in Plan Assets:				
Fair value of plan assets at beginning of period	654.6	634.1	1.8	7.7
Actual return on plan assets	(40.2)	84.4	—	0.1
Company contributions	14.5	1.5	10.0	8.5
Benefits paid	(57.5)	(59.3)	(11.8)	(14.5)
Lump sum benefits paid	(4.8)	(2.9)	—	—
Administrative expenses paid	(3.1)	(3.2)	—	—
Fair value of plan assets at end of period	563.5	654.6	—	1.8
Unfunded status at end of period	$ (170.3)	$ (163.3)	$ (151.6)	$ (168.9)
Amounts recognized in assets and liabilities:				
Current liabilities	$ (1.4)	$ (1.7)	(15.4)	(14.7)
Noncurrent liabilities	(168.9)	(161.6)	(136.2)	(154.2)
	$ (170.3)	**$ (163.3)**	**$ (151.6)**	**$ (168.9)**
Amounts in accumulated other comprehensive income (loss), pre-tax:				
Prior service cost (credit)	**$ —**	**$ —**	**$ (2.4)**	**$ (2.5)**
Discount rate used to determine benefit obligations at end of period:	4.3%	3.7%	4.3%	3.6%

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 2018 and 2017.

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. The lump sum payment option was most recently extended through September 2019 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 $733.8 million and $817.9 million as of December 31, 2018 and 2017, respectively. As of December 31, 2018 and 2017, 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,	
	2018	2017	2018	2017
Net Periodic Benefit (Credits) Costs				
Service costs	$ 3.4	$ 3.7	$ —	$ —
Interest costs	28.7	32.2	5.8	7.2
Expected return on plan assets (gains)	(41.0)	(40.7)	—	—
Amortization of prior service costs (credits), net	—	—	(0.2)	(0.1)
Actuarial (gains) losses, net	30.4	(10.9)	(13.1)	(24.9)
Loss on plan changes resulting from legal settlement	—	—	—	10.0
Net periodic benefit (credits) costs	**$ 21.5**	**$ (15.7)**	**$ (7.5)**	**$ (7.8)**
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income (Loss)				
Amortization of prior service (costs) credits, net	$ —	$ —	$ 0.2	$ 0.1
Total loss recognized in other comprehensive income (loss), pre-tax	**$ —**	**$ —**	**$ 0.2**	**$ 0.1**
Total recognized in net periodic benefit costs (income) and other comprehensive income (loss), pre-tax	**$ 21.5**	**$ (15.7)**	**$ (7.3)**	**$ (7.7)**

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).*

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,	
	2018	2017	2018	2017
Discount rate	4.3%	3.7%	4.3%	3.6%
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,	
	2018	2017
Healthcare cost trend rate for the following year	6.0%	6.5%
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	2021	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	$ 2.9	$ (2.7)
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 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, 2018	December 31, 2017	2019 Target
Equity securities	48%	49%	40 - 60%
Debt securities	49%	49%	40 - 60%
Cash	3%	2%	0 - 5%
	100%	100%	

Prefunding for the postretirement health and life benefit plans was discontinued in 2012 and the remaining assets were invested in short-term bond funds as of December 31, 2017, and were expended in early 2018. Benefit costs of the postretirement health and life benefit plans are primarily funded as costs are incurred.

Plan assets are measured at fair value. Following are the plan investments as of December 31, 2018 and 2017, categorized by the fair value hierarchy levels described in *Note 10, Fair Value Measurements*:

	Defined Benefit Pension Plans							
(in millions)	**Level 1**		**Level 2**		**Level 3**		**Total**	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
U.S. government securities	$ —	$ —	$ 34.6	$ 34.6	$ —	$ —	$ 34.6	$ 34.6
Corporate debt	—	—	104.7	119.7	—	—	104.7	119.7
Municipal bonds and non-U.S. government securities	—	—	2.0	3.5	—	—	2.0	3.5
Mortgage and asset backed securities	—	—	4.2	0.3	—	—	4.2	0.3
Fair value of investments by hierarchy level	**$ —**	**$ —**	**$ 145.5**	**$ 158.1**	**$ —**	**$ —**	**$ 145.5**	**$ 158.1**
Investments measured at NAV (a)							416.1	494.7
Accrued interest receivable							1.8	1.9
Unsettled transactions							0.1	(0.1)
Plan assets							**$ 563.5**	**$ 654.6**

	Postretirement Health and Life Benefit Plans							
(in millions)	**Level 1**		**Level 2**		**Level 3**		**Total**	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Money market funds	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Bond mutual funds	—	1.8	—	—	—	—	—	1.8
Fair value of investments by hierarchy level	**$ —**	**$ 1.8**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ 1.8**

(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

Centrus expects to contribute $9.4 million to the qualified defined benefit pension plans, $1.4 million to the non-qualified defined benefit pension plans and $15.3 million to the postretirement health and life benefit plans in 2019. 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
2019	$ 57.9	$ 15.3
2020	56.0	13.9
2021	54.8	13.2
2022	53.6	12.6
2023	52.4	12.1
2024 to 2028	245.1	49.3

Other Plans

Centrus 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 $1.8 million in 2018 and $2.3 million in 2017.

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 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. Centrus matching contributions amounted to less than $0.1 million in 2018 and 2017.

12. 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, 2018, there were approximately 596,000 shares available for future awards, including approximately 120,000 shares associated with awards that were cancelled or forfeited without being exercised.

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

	Year Ended December 31,	
	2018	2017
Total stock-based compensation costs:		
Restricted stock units	$ 0.1	$ 0.1
Stock options	0.3	0.4
Expense included in selling, general and administrative expense	**$ 0.4**	**$ 0.5**
Total recognized tax benefit	$ —	$ —

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

Stock-based compensation cost 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, 2018, there was $0.1 million of unrecognized compensation cost, adjusted for actual forfeitures, related to non-vested stock-based payments granted, of which $0.1 million relates to stock options and less than $0.1 million relates to restricted stock units. That cost is expected to be recognized over a weighted-average period of 3 months. There were no stock options granted, exercised or forfeited during the years ended December 31, 2018 and 2017.

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, 2018, approximately 141,000 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. For reporting periods prior to January 1, 2017, the Company used historical data to estimate pre-vesting option forfeitures at the time of grant and revised those estimates in subsequent periods if actual forfeitures differed from the estimates. Effective January 1, 2017, the Company recognizes forfeitures as they occur. Compensation expense is recognized for stock option awards that are expected to vest. There were no option grants in the years ended December 31, 2018 and 2017.

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, 2017	425	$4.14	7.3	$0.1
Outstanding at December 31, 2018	425	$4.14	6.3	$—
Exercisable at December 31, 2018	345	$4.11	6.3	$—

Stock options outstanding and options exercisable at December 31, 2018, follow:

Stock Exercise Price	Options Outstanding (thousands)	Remaining Contractual Life in Years	Options Exercisable (thousands)
$5.62	22	5.9	22
$4.37	300	6.2	225
$3.90	23	6.6	23
$3.93	15	6.6	15
$2.71	50	6.8	50
$2.68	15	7.4	10

13. INCOME TAXES

Benefit

The benefit from income taxes from continuing operations is as follows (in millions):

	Year Ended December 31, 2018	Year Ended December 31, 2017
Current:		
Federal	$ —	$ —
State and local	—	(0.1)
Foreign	—	—
	—	(0.1)
Deferred:		
Federal	—	—
State and local	—	—
Foreign	—	—
	—	—
	$ —	**$ (0.1)**

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, 2018	December 31, 2017
Deferred tax assets:		
Employee benefits costs	$ 73.6	$ 79.9
Inventory	11.1	2.4
Property, plant and equipment	185.9	187.0
Net operating loss and credit carryforwards	187.1	166.9
Accrued expenses	0.9	0.9
Long-term debt and financing costs	15.3	17.3
Other	0.2	5.5
	474.1	459.9
Valuation allowance	(456.6)	(440.7)
Deferred tax assets, net of valuation allowance	$ 17.5	$ 19.2
Deferred tax liabilities:		
Intangible assets	$ 16.0	$ 17.7
Prepaid expenses	1.5	1.5
Deferred tax liabilities	$ 17.5	$ 19.2
	$ —	**$ —**

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. For the year ended December 31, 2017, the Company recorded a decrease in net deferred tax assets before valuation allowance which resulted primarily from the remeasurement at 21% in accordance with the Tax Act. 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 $791.3 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 $89.2 million and $10.1 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 Internal Revenue Code Section 108. Centrus also has state net operating losses of $0.3 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 Internal Revenue 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,	
	2018	**2017**
Federal statutory tax rate	21 %	35 %
Valuation allowance against net deferred tax assets	(15)	(2,156)
State rate changes	(6)	—
Executive compensation	(1)	—
State income tax expense, net of federal benefit	1	1
Tax Cuts and Jobs Act of 2017	—	2,382
Gain on early extinguishment of debt	—	(268)
Interest expense	—	4
Other non-deductible expenses	—	1
Effective tax rate	**— %**	**(1)%**

The Tax Act enacted on December 22, 2017 reduced the U.S. federal corporate income tax rate from 35% to 21%, effective January 1, 2018. The SEC staff issued Staff Accounting Bulletin 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under Accounting Standards Codification 740, *Income Taxes* ("ASC 740"). In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete, but it can determine a reasonable estimate, it must record a provisional estimate in the financial statements. The Company has completed its accounting for the tax effects of the Tax Act, and based on the Company's net operating loss carryovers and full valuation allowance, there is no impact to its consolidated financial statements.

As a result of the reduction of the federal corporate income tax rate, the net deferred tax assets have been remeasured as of December 31, 2017. Primarily as a result of the remeasurement, the effective tax rate for the year ended December 31, 2017 includes a decrease to the net deferred tax assets of $288.9 million, or an increase to the effective tax rate of 2,382%. The effective tax rate also includes a decrease to the valuation allowance against net deferred tax assets of $261.5 million, or a change to the effective tax rate of (2,156)%, and an adjustment to the gain on early extinguishment of debt of $32.5 million or a change to the effective tax rate of (268)%. The Tax Act did not affect the income tax provision for the year ended December 31, 2017.

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 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 $0.2 million as of December 31, 2018 and $0.3 million as of December 31, 2017. 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) decreased $0.1 million during the years ended December 31, 2018 and December 31, 2017. 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,	
	2018	**2017**
Balance at beginning of the period	$ 0.3	$ 0.4
Additions to tax positions of current period	—	0.1
Reductions to tax positions of prior years	(0.1)	(0.2)
Balance at end of the period	**$ 0.2**	**$ 0.3**

Centrus and its subsidiaries file income tax returns with the U.S. government and various states and foreign jurisdictions. As of December 31, 2018, the federal and Maryland statutes of limitation are closed with respect to all tax years through 2014, and the Kentucky statute of limitations is closed with respect to all tax years through 2013.

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, 2018 and 2017. 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, 2018 and 2017.

14. 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,	
	2018	**2017**
Numerator (in millions):		
Net income (loss)	$ (104.1)	$ 12.2
Preferred stock dividends - undeclared and cumulative	7.8	6.9
Net income (loss) allocable to common stockholders	**$ (111.9)**	**$ 5.3**
Denominator (in thousands):		
Average common shares outstanding - basic	9,151	9,081
Potentially dilutive shares related to stock options and restricted stock units [(a)]	—	—
Average common shares outstanding - diluted	**9,151**	**9,081**
Net income (loss) per common share (in dollars) - basic and diluted:	$ (12.23)	$ 0.58
(a) Common stock equivalents excluded from the diluted calculation as a result of a net loss in the period (in thousands)	23	—
Options outstanding and considered anti-dilutive as their exercise price exceeded the average share market price (in thousands)	360	200

15. 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 9,437,389 shares of Common Stock, consisting of 8,031,307 shares of Class A Common Stock and 1,406,082 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, 2018.

A total of 38,751 shares of Class A Common Stock were issued in settlement of vested restricted stock units to three former members of the Board of Directors following the end of their service on May 31, 2017. Shares of Class B Common Stock that are sold in the market are automatically converted to shares of Class A Common Stock. In the twelve months ended December 31, 2017, a total of 30,318 shares of Class B Common Stock were sold in the market and converted to shares of Class A Common Stock as of December 31, 2017.

The Company has reserved 1,200,000 shares of Class A Common Stock under its management incentive plan, of which approximately 596,000 shares are available for future awards as of December 31, 2018. Refer to *Note 12, 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, 2018, and December 31, 2017.

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, 2018, and has not declared, accrued or paid dividends on the Series B Preferred Stock as of December 31, 2018. 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, 2018, the Series B Preferred Stock has an aggregate liquidation preference of $119.3 million including accumulated dividends of $14.7 million. As of December 31, 2017, the Series B Preferred Stock had an aggregate liquidation preference of $111.5 million, including accumulated dividends of $6.9 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 (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.

Effective on February 14, 2017, in connection with the settlement and completion of the exchange offer and consent solicitation, the Company amended the Rights Agreement solely 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."

The Company's stockholders approved the Rights Agreement at the 2017 annual meeting of stockholders on May 31, 2017. Unless earlier terminated or extended in accordance with the Rights Agreement, the rights issued under the Rights Agreement expire on April 5, 2019.

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, 2016	—	7,563,600	1,436,400
Issuance of Preferred Stock	104,574	—	—
Issuance of Class A Common Stock	—	38,751	—
Conversion of Common Stock from Class B to Class A	—	30,318	(30,318)
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**

16. COMMITMENTS AND CONTINGENCIES

Commitments under SWU Purchase Agreements

TENEX

A major supplier of SWU to the Company is the Russian government entity Joint Stock Company “TENEX” (“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. 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. The Company would then have the right 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 is subject to an adjustment that the Company anticipates will reduce the unit costs of SWU under this contract for the duration of the contract.

Orano

On April 27, 2018, the Company entered into an agreement (the “Orano Supply Agreement”) with Orano Cycle (formerly, AREVA NC) (“Orano”) for the long-term supply to the Company of SWU contained in LEU, nominally commencing in 2023. Under the 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.

Nuclear Fuel Industries, Ltd.

On August 28, 2018, Enrichment Corp. entered into an agreement with Nuclear Fuel Industries, Ltd. (“NFI”) pursuant to which Enrichment Corp. would make a one-time purchase of SWU and uranium from NFI for $7.1 million. In March 2019, Enrichment Corp. completed the purchase from NFI. Toshiba America Nuclear Energy Corporation (“TANE”) holds 718,200 shares (51%) 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.

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 Centrus under those agreements as part of the Company’s Chapter 11 bankruptcy process. The 2002 DOE-USEC Agreement requires Centrus 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 Centrus fails to meet a milestone that would adversely impact its ability to begin commercial operations of the American Centrifuge Plant on schedule, and such delay was within Centrus’ control or was due to its fault or negligence or if Centrus abandons or constructively abandons the commercial deployment of an advanced enrichment technology. These remedies include terminating the 2002 DOE-USEC Agreement, revoking Centrus’ access to DOE’s centrifuge technology that is required for the success of the American Centrifuge project, 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 project.

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 an American Centrifuge Plant milestone, DOE and Centrus will jointly meet to discuss in good faith possible adjustments to the milestones as appropriate to accommodate the delaying event. The Company notified DOE that it had not met the June 2014 milestone within the time period provided due to events beyond its control and without the fault or negligence of the Company. The assumption of the 2002 DOE-USEC Agreement provided for under the Plan of Reorganization 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 Centrus have agreed that all rights, remedies and defenses of the parties with respect to any missed milestones since March 5, 2014, including the June 2014 and November 2014 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

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”) in the amount of approximately $314 million. 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 FENOC and FENG 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. No amounts have been recorded in the Company’s consolidated financial statements related to the claims.

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.

Lease Commitments

Expenses under operating leases for office space, equipment and the Piketon and Oak Ridge facilities amounted to $3.3 million and $3.1 million in 2018 and 2017, respectively. Future estimated minimum lease payments and expected lease administration payments for leases with remaining terms in excess of one year follow (in millions):

2019	$ 0.9
2020	0.9
2021	0.9
2022	1.0
2023	1.0
Thereafter	3.8
	$ 8.5

Centrus has a lease with DOE for centrifuge testing facilities in Oak Ridge through December 2019. Centrus leases facilities in Piketon for the American Centrifuge Plant from DOE. The current five-year lease term is through June 2019. Centrus has the option to extend the lease term for additional five-year terms. DOE may terminate the lease for default, including if DOE is able to exercise its remedies with respect to the ACP under the 2002 DOE-USEC Agreement.

Centrus leases the office space for its corporate headquarters in Bethesda, Maryland through October 2027 with an option to extend for five years. In May 2017, Centrus entered into a lease through July 2021 for 6,000 square feet of additional office space in Waverly, Ohio. Centrus also has short-term leases for small areas of office space in Washington, DC and Tokyo, Japan.

17. 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 as detailed in *Note 11, Pension and Postretirement Health and Life Benefits*.

18. 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,	
	2018	**2017**
United States	$ 141.3	$ 134.5
Foreign:		
Belgium	35.2	34.9
Japan	3.1	49.0
Other	13.4	—
Total foreign	**51.7**	**83.9**
Total revenue	**$ 193.0**	**$ 218.4**

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 2017, the Company's 10 largest customers represented approximately 97% of total revenue and its four largest customers represented approximately 53% of total revenue. In our LEU segment, revenue from Synatom, Entergy, American Electric Power and South Carolina Electric & Gas represented approximately 16%, 14%, 12% and 11%, respectively, of total revenue in 2017. In the Company's contract services segment, the U.S. government and its contractors represented approximately 12% of total revenue in 2018 and 11% in 2017, respectively. No other customer represented more than 10% of total revenue in 2018 or 2017.

Centrus has two reportable segments: the LEU segment with two components, SWU and uranium, and the contract services 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 contract services segment includes revenue and cost of sales for work that Centrus performs under a fixed price agreement as a contractor to UT-Battelle. The contract services 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 Company's revenue and gross profit by segment are as follows (in millions):

	Year Ended December 31,	
	2018	**2017**
Revenue		
LEU segment:		
Separative work units	$ 130.6	$ 195.4
Uranium	33.8	—
Total	**164.4**	**195.4**
Contract services segment	28.6	23.0
Total revenue	**$ 193.0**	**$ 218.4**
Segment Gross Profit (Loss)		
LEU segment	$ (23.3)	$ 32.7
Contract services segment	5.4	(2.5)
Gross profit (loss)	**$ (17.9)**	**$ 30.2**

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, 2018, and December 31, 2017.

19. QUARTERLY RESULTS OF OPERATIONS (Unaudited)

(in millions, except per share data)

	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 license and decommissioning 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
Gains 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	(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)

	2017				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Revenue	$ 7.2	$ 44.0	$ 50.3	$ 116.9	$ 218.4
Cost of sales	10.1	48.7	39.0	90.4	188.2
Gross profit (loss)	(2.9)	(4.7)	11.3	26.5	30.2
Advanced technology license and decommissioning costs	6.1	4.4	4.5	0.7	15.7
Selling, general and administrative	12.4	9.7	11.0	10.6	43.7
Amortization of intangible assets	1.2	2.0	2.5	4.9	10.6
Special charges for workforce reductions and advisory costs	2.4	2.3	2.4	2.4	9.5
Gains on sales of assets	(1.0)	(0.7)	(0.6)	(2.3)	(4.6)
Operating income (loss)	(24.0)	(22.4)	(8.5)	10.2	(44.7)
Gain on early extinguishment of debt	(33.6)	—	—	—	(33.6)
Nonoperating components of net periodic benefit expense (income)	(0.4)	(0.4)	(0.3)	(26.1)	(27.2)
Interest expense	2.9	0.7	0.7	1.0	5.3
Investment income	(0.3)	(0.3)	(0.4)	(0.3)	(1.3)
Income tax (benefit) expense	(0.2)	—	—	0.1	(0.1)
Net income (loss)	**$ 7.6**	**$ (22.4)**	**$ (8.5)**	**$ 35.5**	**$ 12.2**
Preferred stock dividends - undeclared and cumulative	1.0	2.0	2.0	1.9	6.9
Net income (loss) allocable to common stockholders	**$ 6.6**	**$ (24.4)**	**$ (10.5)**	**$ 33.6**	**$ 5.3**
Net income (loss) per share:					
Basic	$ 0.73	$ (2.69)	$ (1.15)	$ 3.69	$ 0.58
Diluted	$ 0.72	$ (2.69)	$ (1.15)	$ 3.69	$ 0.58

The calculation of net income (loss) per share on a dilutive basis is provided in *Note 14, 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.

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 Title: Chairman of the Board	Name: Daniel B. Poneman Title: Executive

Confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to this omitted information.**

Services Agreement to Provide Technical and Resource Support

This Services Agreement ("**Agreement**"), effective November 28, 2018 is made and entered into by and between X Energy LLC, a Maryland limited liability company, with offices at 7701 Greenbelt Road, Suite 320, Greenbelt, Maryland 20770 ("**X-energ**y"), and American Centrifuge Operating, LLC, a Delaware limited liability company, with offices at 6901 Rockledge Drive, Suite 800, Bethesda, Maryland 20817 (" **ACO**") (each of X-energy and ACO individually a "**Party**" and collectively the "**Parties**").

WHEREAS, X-energy is a U.S. nuclear power reactor and fuel design engineering services company that is developing the Xe-100 Pebble Bed Small Modular Reactor ("**Xe-100**"), a Generation IV, high-temperature gas- cooled nuclear power reactor, and the associated nuclear fuel designs for the Xe-100;

WHEREAS, ACO is a U.S. supplier of enriched uranium fuel for commercial nuclear power plants in the United States and around the world;

WHEREAS, X-energy and the U.S. Department of Energy ("**DOE**") entered into an Advanced Nuclear Technology Development Cooperative Agreement No. DE-NE0008475 ("**Cooperative Agreement**"), which provides DOE funding, on a cost-shared basis for design and license application development for TRISO-X, and further allows in-kind contributions to fulfill a portion of X-energy's cost-sharing obligation (attached in **Exhibit A**); and

WHEREAS, X-energy and ACO wish to enter into a contractual relationship whereby ACO will provide i) technical and resource support to X-energy on a time and materials or fixed-price basis for preliminary design and licensing of X-energy's nuclear fuel production facility, and ii) in-kind contributions in support of X-energy's Cooperative Agreement in the form of low cost) services pricing to X-energy.

NOW, THEREFORE, X-energy and ACO agree as follows:

1.1 **Services**. This is an Indefinite Delivery/Indefinite Quantity (IDIQ) services agreement that establishes the terms and conditions whereby X-energy will, through issuance of separate Task Orders (each, a "**Task Order**"), to ACO, contract for technical and resource support services (the "**Services**") to support X-energy. Prior to issuing Task Orders, X-energy shall provide ACO with the following data, which together shall be considered a Task Order Request for Proposal ("**Task Order RFP**"):

1.1.1 A functional description of the work identifying the objectives or results desired from the contemplated Task Order.

1.1.2 Proposed performance standards to be used as criteria for determining whether the work requirements have been met.

1.1.3 A request to ACO to include the technical approach, period of performance, appropriate fair market valuation information of any in-kind contributions, time and materials estimates, applicable labor rates, and any other information required by X-energy to determine the acceptance of ACO's proposal.

1.2 ACO shall submit the response to each Task Order RFP to X-energy, and such response/proposal shall be valid for a minimum of ninety (90) calendar days, unless otherwise noted by ACO.

1.3 ACO shall provide a technical approach for fulfilling the requirements specified in each Task Order RFP.

1.4 After review and any necessary discussions regarding the response to each Task Order RFP, X-energy may issue a Task Order for ACO's acceptance, containing, at a minimum, the following:

1.4.1 Date of the order.

1.4.2 Task Order number.

1.4.3 Functional description of the work identifying the objectives or results desired from the Task Order, including special instructions or other information necessary for performance of the Task Order.

1.4.4 Performance standards, and where appropriate, quality assurance standards.

1.4.5 Anticipated cost and/or fair market value each as agreed by the Parties in the Task Order.

1.4.6 Any other resources (travel, materials, equipment, facilities, etc.) authorized.

1.4.7 Delivery/performance schedule including start and end dates.

1.4.8 Place of Performance.

1.4.9 Authorized funding.

1.5 ACO shall provide the Services (a) in accordance with the terms and subject to the conditions set forth in the respective Task Order and this Agreement; (b) using personnel with required skills, experience, and qualifications; (c) in a timely, workmanlike, and professional manner; (d) in accordance with the professional standards recognized in the U.S. nuclear fuel industry; and (e) to the satisfaction of X-energy.

2. Indefinite Quantity

2.1 Performance shall be made only as authorized by formal Task Orders issued in accordance with Sections 1.4 and 1.5.

2.2 There is no limit to the number of Task Orders that may be issued. X-energy may issue Task Orders as a result of Task Order RFPs issued in accordance with Section 1.1.

2.3 This Agreement and the work conducted pursuant to Task Orders issued hereunder is not intended to be exclusive as between the Parties.

3. <u>In-Kind Contributions</u>

3.1 In-kind contributions represent non-cash contributions provided by ACO, which can be applied by X- energy to fulfill a portion of X-energy's cost-sharing obligation to the DOE under the Cooperative Agreement. In-kind contributions may be in the form of personal property (equipment and supplies), real property (land and buildings) or services which are directly beneficial, specifically identifiable and necessary to performance of the project or program under the Cooperative Agreement.

3.2 In-kind contributions will be identified in the Task Orders issued under this Agreement and are required to be:

3.2.1 Valued at no more than fair market value.

3.2.2 Verifiable from supporting documentation provided by ACO.

3.2.3 Necessary for the effective and efficient accomplishment of the Project.

3.2.4 Types of charges that would otherwise be allowable under ACO's Cost Accounting Standards Disclosure Statement and applicable Federal Acquisition Regulation standards and requirements.

3.2.5 Not charged to the Federal Government under any contract, agreement or grant, unless specifically authorized by legislation.

3.2.6 Not included as contributions for any other Federal program.

3.3 The Parties anticipate that ACO will provide additional in-kind contributions to X-energy including, but not limited to formulaic discounts to the fair market price to be paid by X-energy under certain Task Orders issued pursuant to this Agreement. The Parties will document such formulas and discounted fair market prices in the appropriate Task Orders.

4. <u>ACO Obligations</u>. ACO shall:

4.1 Provide representatives for the following positions:

4.1.1 A primary contact to act as its authorized representative with respect to all matters pertaining to this Agreement (the "**ACO Contract Administrator**").

4.1.2 A project manager or technical representative for each executed Task Order who is authorized to discuss technical aspects of the work being performed. (collectively, with the ACO Contract Administrator, "**ACO Representatives**")

4.1.3 A sufficient number of employees or subcontractors to perform the Services set out in each Task Order, each of whose names, positions, billing rates, and respective levels of experience and any relevant licenses shall be set forth in the respective Task Order.

4.2 Make no changes in the above ACO Representatives except:

4.2.1 Upon written notice to X-energy.

4.2.2 Upon the written request of X-energy, in which case ACO shall use its best efforts to promptly appoint a qualified replacement; or

4.2.3 Upon the resignation, termination, death, or disability of an existing ACO Representative.

4.3 Assign only qualified, authorized ACO Representatives and employees to provide the Services. Prior to any personnel performing any work hereunder, ACO shall: (i) determine that such personnel have the legal right to work in the United States; and (ii) at its sole cost and expense, conduct background checks on such personnel, which background checks shall comprise at a minimum a review of credit history, references and criminal records, in accordance with state, federal and local law.

4.4 Obtain X-energy's written approval, which shall not be unreasonably withheld or delayed, prior to entering into agreements with or otherwise engaging any person, including all new third-party subcontractors or suppliers to provide any direct charge Services (each such approved subcontractor or other third party, a "**Permitted Subcontractor**"). For avoidance of doubt, all subcontractors engaged by ACO as of the date of this Agreement shall be considered Permitted Subcontractors. X-energy's approval shall not relieve ACO of its obligations under this Agreement, and ACO shall remain fully responsible for the performance of each such Permitted Subcontractor and its employees and shall direct its employees and Permitted Subcontractors to adhere to the terms and conditions of this Agreement and any Task Order. Nothing contained in this Agreement shall create any contractual relationship between X-energy and any ACO subcontractor or supplier.

4.5 Direct each Permitted Subcontractor to adhere to the confidentiality and intellectual property provisions of this Agreement, by entering into a non-disclosure agreement or intellectual property assignment or license agreement in a form that is reasonably satisfactory to X-energy.

4.6 Comply with all applicable laws and regulations in providing the Services.

4.7 Comply with, and direct each Permitted Subcontractor to comply with, all required DOE flow down provisions contained in **Exhibit B** in providing the Services.

4.8 To the extent practicable and not prohibited by law, rule or court order, provide prompt notice to X- energy (1) if it is being investigated or is suspended, debarred, or declared ineligible by any U.S. Government Agency or (2) if it receives a notice of proposed investigation or debarment from any U.S. Government Agency. Failure to so notify X-energy may be considered by X-energy as a material breach of and default under this Agreement

4.9 Where not in conflict with ACO rules or policy, comply with all X-energy rules, regulations, and policies of which ACO has been made aware, in its provision of the Services, including security procedures concerning systems and data and remote access thereto, building security procedures, and general health and safety practices and procedures.

4.10 Maintain complete and accurate records of the labor and materials directly charged by ACO in providing the Services. During the Term (as defined in Section 13.1) and for a period of three (3) years thereafter, upon X-energy's written request, ACO shall provide access to X-energy or X-energy's representative under obligation of confidentiality acceptable to ACO copies of such records and interview ACO Representatives in connection with the provision of the Services; provided that X-energy provides ACO with reasonable advance written notice of the planned inspection, and any such inspection shall take place during regular business hours.

4.11 Agree and acknowledge that time is of the essence with respect to ACO's obligations hereunder and that prompt and timely performance of all such obligations, including all timetables, project milestones and other requirements in this Agreement and each Task Order, is required.

4.12 The labor rates included in **<u>Exhibit C</u>** are firm through November 31, 2019. However, in the event of a significant material event related to ACO's Cost Accounting Standards affecting the rates, the Parties agree to negotiate in good faith appropriate adjustments. Rates for subsequent annual periods will be negotiated in good faith by the Parties and, following agreement, this Agreement shall be amended to revise Exhibit C. Such increases shall not occur more frequently than once per contract year of the Term.

4.13 Ensure that ACO maintains sufficient facilities and resources to timely and competently perform all anticipated work under this Agreement. For the term of this Agreement, ACO will not reassign its employees or subcontractors that are required to timely and competently perform all anticipated work under this Agreement.

4.14 Provide, pursuant to appropriate Task Orders, during the term of this Agreement:

4.14.1 All necessary equipment to perform the Task Orders contemplated under this Agreement, other than certain limited "specialty equipment" as set forth in each Task Order, such as, but not limited to: *****.

4.14.2 Support services required to perform the work for each Task Order under this Agreement.

4.15 The obligations of ACO under this Agreement shall be performed fully within the United States, unless approved in writing in advance by X-energy, which approval shall not be unreasonably withheld or delayed.

5. <u>X-energy Obligations</u>. X-energy shall:

5.1 Cooperate in good faith with ACO in all matters relating to the services provided under this Agreement and in any Task Order.

5.2 Designate one of its employees to serve as its primary contact with respect to this Agreement and to act as its authorized representative with respect to matters pertaining to this Agreement (the "**X-energy Contract Administrator**"), with such designation to remain in force unless and until a successor X-energy Contract Administrator is appointed, in X-energy's discretion.

5.3 Designate one of its employees to serve as technical representative for each Task Order.

5.4 Ensure that the X-energy Contract Administrator responds promptly and accurately to any reasonable requests from ACO for instructions, information, or approvals required by ACO to provide the Services.

5.5 Promptly pay properly submitted and undisputed ACO invoices when due.

5.6 Comply with all applicable state, federal and local laws and regulations.

5.7 Follow all ACO rules when present in ACO-controlled areas of ACO facilities.

6. Fees and Expenses.

6.1 For the services to be performed hereunder, X-energy will pay to ACO a fee determined in accordance with the fee schedule set out in each Task Order. This fee may be structured as a fixed price fee or a time- and-materials based fee, or a blend between the two. The Task Orders shall include all information required to ensure that both parties agree on all components of the billing formula. Unless otherwise provided in the Task Order, undisputed fees will be payable within thirty (30) days of receipt by X-energy of an invoice from ACO, accompanied by documentation reasonably requested by X-energy, in advance, evidencing all charges.

6.1.1 Where the Services are provided on a time and materials basis:

6.1.1.1 The fees payable for the Services shall be calculated in accordance with ACO's labor rate schedules set forth in Exhibit C and the applicable Task Order; and

6.1.1.2 ACO shall issue invoices to X-energy monthly in arrears for its fees for time for the immediately preceding month, together with a detailed breakdown of any materials and expenses for such month.

6.1.2 Where the services are provided for a fixed price, the total fees for the services shall be the amount set out in the applicable Task Order. The total price shall be paid to ACO in installments, as set out in the Task Order, with each installment being conditioned upon ACO providing X-energy the deliverable or achieving the corresponding project milestone in respect of which an installment is due. ACO shall issue invoices to X-energy for the fees that are then payable.

6.2 Within thirty (30) days of receipt by X-energy of an invoice from ACO accompanied by receipts and supporting documentation reasonably acceptable to X-energy, X-energy shall reimburse ACO for all expenses reasonably incurred in accordance with the Task Order. All fees, expenses, and expense categories detailed in a Task Order shall be deemed pre-approved by X-energy upon approval of the Task Order by the X-energy Contract Administrator. All ACO expenses not pre-approved either separately or on the Task Order by the X-energy Contract Administrator, or not otherwise meeting the requirements of this Agreement or the Task Order to which it applies shall be reimbursed at the sole discretion of X-energy.

6.3 X-energy shall be responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state or local governmental entity on any amounts payable by X-energy hereunder; provided, that, in no event shall X-energy pay or be responsible for any taxes imposed on, or with respect to, ACO's income, revenues, gross receipts, personnel or real or personal property or other assets.

7. Change Orders.

7.1 If either Party wishes to change the scope or performance of the work under a duly executed Task Order or this Agreement, it shall submit details of the requested change to the other Party's Contract Administrator in writing. ACO shall, within a reasonable time after receipt of X-energy's written request (and, if such request is initiated by X-energy not more than thirty (30) calendar days, or ten (10) calendar days if deemed an exigent change by X-energy) after receipt of X-energy's written request), provide a written estimate to X-energy of:

7.1.1 the likely time required to implement the change;

7.1.2 any necessary variations to the fees and other charges for the Services arising from the change;

7.1.3 the likely effect of the change on the Services; and

7.1.4 any other impact the change might have on the performance of this Agreement.

7.2 Promptly after receipt of the written estimate, the Parties shall negotiate in good faith and agree in writing on the terms of such change (a "**Change Order**"). Neither Party shall be bound by any Change Order unless mutually agreed upon in writing. A Change Order signed by X-energy and ACO indicates an agreement to the changes and/or the amount of an adjustment in the projected price, and/or adjustment in the schedule as reflected in such Change Order.

8. Disputes. Any dispute arising under or related to this Agreement or under any Task Order shall be resolved, to the maximum possible extent, through good faith negotiation between the Parties at the working level. If, after attempting to resolve a dispute at the working level, the Parties still cannot come to agreement, the issue will be presented to senior executives of each of the Parties, who also will work in good faith to resolve the dispute. If such senior executives fail to resolve the dispute, the Parties shall settle the dispute through binding arbitration administered by the [American Arbitration Association, under its Commercial Arbitration Rules. The number of arbitrators shall be three (3), and the place of arbitration shall be mutually agreed upon. Maryland law shall apply. Judgment on the award rendered by the arbitrators may be entered in any court having jurisdiction thereof.

9. Intellectual Property.

9.1 Definitions.

"Intellectual Property Rights" means any rights with respect to intellectual property in information and includes, without limitation, as required by the context: patents, patent applications, and other patent rights; moral rights (to the extent possible according to applicable law), copyrights, copyright registrations, and copyright rights (including, without limitation, copyrights, copyright registrations, and copyright rights with respect to computer software, firmware, programming tools, drawings, specifications, databases, and documentation); trade secrets, know-how, and other rights with respect to confidential or proprietary information; trademark, trade name, and similar rights; other rights with respect to information provided by either ACO or X-energy; other intellectual and industrial property rights, whether or not subject to statutory registration or protection in any part of the world; the right to claim priority with respect to any of the foregoing rights; and all rights under any license or other arrangement with respect to the foregoing.

9.2 ACO assigns to X-energy ACO's entire right, title, and interest in any invention, technique, process, device, discovery, improvement, or know-how, whether patentable or not, hereafter made or conceived by ACO on or after the Effective Date of this Agreement while working for or on behalf of X-energy on any active Task Order, and depends on either:

9.2.1 ACO's knowledge of Confidential Information (as defined in Section 10) it obtains from X- energy.

9.2.2 The use of X-energy equipment, supplies, facilities, information, or materials.

9.3 ACO shall disclose any such invention, technique, process, device, discovery, improvement, or know-how promptly to the X-energy Contract Administrator.

9.4 ACO shall, upon request of X-energy, promptly execute a specific assignment of title to X-energy, and do anything else reasonably necessary to enable X-energy to secure for itself, patent, trade secret, or any other proprietary rights in the United States or other countries. It shall be conclusively presumed that any patent applications relating to a Task Order, related to trade secrets of X-energy, or which relate to tasks assigned to ACO by X-energy, which ACO may file within one year after termination of this Agreement, shall belong to X-energy, and ACO hereby assigns the same to X-energy, as having been conceived or reduced to practice during the term of this Agreement.

9.5 All writings or works of authorship, including, without limitation, program codes or documentation, produced or authored by ACO in the course of performing services for X-energy, together with any associated copyrights, are works made for hire and the exclusive property of X-energy. To the extent that any writings or works of authorship may not, by operation of law, be works made for hire, this Agreement shall constitute an irrevocable assignment by ACO to X-energy of the ownership of and all rights of copyright in, such items, and X-energy shall have the right to obtain and hold in its own name, rights of copyright, copyright registrations, and similar protections which may be available in the works. ACO shall provide X-energy or its designees all assistance reasonably required to perfect such rights.

9.6 ACO retains all Intellectual Property Rights, and rights to discoveries and improvements made or conceived prior to the Effective Date of this Agreement. Such Intellectual Property Rights, and rights to discoveries and improvements made or conceived by ACO before the Effective Date of this Agreement, are expressly reserved and excepted from the provisions of Section 9.

10. Confidentiality. The Parties entered into a non-disclosure agreement on May 5, 2017 as amended January 18, 2018 ("**NDA**") governing the definition and treatment of confidential information ("**Confidential Information**") between the Parties. The NDA is incorporated in its entirety and attached hereto as **Exhibit D**

11. Representations and Warranties.

11.1 Each Party represents and warrants to the other Party that:

11.1.1 it is duly organized, validly existing and in good standing as a corporation or other entity as represented herein under the laws and regulations of its jurisdiction of incorporation, organization or chartering;

11.1.2 it has the full right, power and authority to enter into this Agreement, to grant the rights and any licenses granted hereunder and to perform its obligations hereunder;

11.1.3 the execution of this Agreement by its representative whose signature is set forth at the end hereof has been duly authorized by all necessary corporate action of the Party; and

11.1.4 when executed and delivered by such Party, this Agreement will constitute the legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.

11.2 ACO represents and warrants to X-energy that:

11.2.1 it shall perform the services under this Agreement and each duly executed Task Order using personnel of required skill, experience and qualifications and in a professional and workmanlike manner in accordance with best industry standards for similar services and shall devote adequate resources to meet its obligations under this Agreement;

11.2.2 to its knowledge, it is in compliance with, and shall perform all Services in compliance with, all applicable laws;

11.2.3 X-energy will receive good and valid title to all deliverables under any Task Order, free and clear of all encumbrances and liens of any kind, except for any ACO intellectual property;

11.2.4 none of ACO's services, deliverables and X-energy's use thereof (a) are known to infringe upon or will intentionally infringe any intellectual property right of any third party, and (b) as of the date hereof, there are no pending or, to ACO's knowledge, threatened claims, litigation or other proceedings pending against ACO by any third party based on an alleged violation of such intellectual property rights, in each case, excluding any infringement or claim, litigation or other proceedings to the extent arising out of (i) any instruction, information, designs, specifications or other materials provided by X-energy to ACO, (ii) use of any deliverables in combination with any materials or equipment not supplied or specified by ACO, if the infringement would have been avoided by the use of the deliverables not so combined, and (iii) any modifications or changes made to the deliverables by or on behalf of any person other than ACO; and

11.2.5 the services and deliverables will conform in all material respects with all requirements or specifications stated in this Agreement and the applicable Task Order.

11.3 EXCEPT FOR THE EXPRESS WARRANTIES IN THIS AGREEMENT (A) EACH PARTY HEREBY DISCLAIMS ALL WARRANTIES; EITHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE UNDER THIS AGREEMENT; AND

(B) ACO SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A

PARTICULAR PURPOSE.

12. Non-Competition. *****.

13. Term, Termination, and Survival.

13.1 This Agreement shall commence as of the Effective Date and shall continue thereafter until the earlier of (i) completion of all Services required for Tasks issued according to Section 1 or (ii) June 30, 2021 (collectively, the "**Term**"), unless sooner terminated pursuant to this Section 13.

13.2 X-energy, in its sole discretion, may terminate this Agreement, or any Task Order issued hereunder, in whole or in part, at any time, without cause, and without liability except for required payment, if any, for services rendered, and reimbursement for authorized materials and expenses incurred, up to and on the termination date by providing at least sixty (60) days prior written notice to ACO.

13.3 Either Party may terminate this Agreement for default, effective upon written notice to the other Party (the "**Defaulting Party**"), if the Defaulting Party:

13.3.1 Materially breaches this Agreement, and such breach is incapable of cure, or with respect to a material breach capable of cure, the Defaulting Party does not cure such breach within thirty (30) days after receipt of written notice of such breach.

13.3.2 Becomes insolvent or admits its inability to pay its debts generally as they become due.

13.3.3 Becomes subject, voluntarily or involuntarily, to any proceeding under any domestic or foreign bankruptcy or insolvency law, which is not fully stayed within ten (10) business days, or is not dismissed or vacated within forty-five (45) calendar days after filing.

13.3.4 Is dissolved or liquidated or takes any corporate action for such purpose.

13.3.5 Makes a general assignment for the benefit of creditors.

13.3.6 Has a receiver, trustee, custodian, or similar agent appointed by order of any court of competent jurisdiction to take charge of or sell any material portion of its property or business.

13.4 Subject to any and all DOE rights and obligations, upon expiration or termination of this Agreement for any reason, ACO shall promptly:

13.4.1 Deliver to X-energy all documents, work product, and other materials, whether or not complete, prepared by or on behalf of ACO in the course of performing the Services for which X-energy has paid.

13.4.2 Return to X-energy all X-energy-owned property, equipment, or materials in its possession or control.

13.4.3 Remove any ACO-owned property, equipment, or materials located in X-energy's facilities.

13.4.4 Deliver to X-energy, all documents and tangible materials (and any copies) containing, reflecting, incorporating, or based on X-energy's Confidential Information.

13.4.5 Provide reasonable cooperation and assistance to X-energy in transitioning the Services to an alternate service provider. Other than in a termination for cause due to a ACO default, ACO shall be reimbursed its actual costs in facilitating the transition of the service to an alternate provider.

13.4.6 On a pro rata basis, repay all fees and expenses paid in advance for any Services which have not been provided.

13.4.7 Destroy X-energy's Confidential Information from its computer systems, provided, however, ACO shall not, in connection with the foregoing obligations, be required to identify or delete X-energy's Confidential Information held electronically in archive or back-up systems in accordance with general systems archiving or backup policies; however, in the event of a system restore, all X-energy Confidential Information shall be destroyed. ACO shall not be obligated to return or destroy X-energy's Confidential Information to the extent ACO is required to retain a copy pursuant to applicable law.

13.4.8 Certify in writing to X-energy that it has complied with the requirements of Section 13.

13.4.9 Deliver to X-energy all documents, work product, and other materials, whether or not complete, prepared by or on behalf of ACO in the course of performing the Services for which X-energy has paid.

13.5 Subject to any and all DOE rights and obligations, upon expiration or termination of this Agreement for any reason, X-energy shall promptly:

13.5.1 Return to ACO all ACO-owned property, equipment, or materials in its possession or control.

13.5.2 Remove any X-energy-owned property, equipment, or materials located in ACO's facilities.

13.5.3 Deliver to ACO, all documents and tangible materials (and any copies) containing, reflecting, incorporating, or based on ACO's Confidential Information, excluding any work product in which ACO's Confidential Information has been incorporated.

13.5.4 On a pro rata basis, repay all fees and expenses paid in advance for any Services which have not been provided.

13.5.5 Destroy ACO's Confidential Information from its computer systems, provided, however, ACO shall not, in connection with the foregoing obligations, be required to identify or delete X- energy's Confidential Information held electronically in archive or back-up systems in accordance with general systems archiving or backup policies; however, in the event of a system restore, all ACO's Confidential Information shall be destroyed. ACO shall not be obligated to return or destroy X-energy's Confidential Information to the extent ACO is required to retain a copy pursuant to applicable law.

13.5.6 Certify in writing to ACO that it has complied with the requirements of Section 13.

13.6 If X-energy, due to ACO's default, terminates this Agreement or any Task Order, in whole or in part, it may reasonably acquire, under commercially reasonable terms, supplies or services similar to those terminated. ACO will be responsible for the excess non-recurring costs incurred by X-energy to complete the deliverables specified in the Task Order that ACO was responsible for fulfilling, provided, such costs do not exceed the remaining value of the Task Order. For the avoidance of doubt, notwithstanding the prior sentence, under no circumstances shall ACO be responsible for reimbursing X- energy for any ongoing or recurring costs or expenses, including, but not limited to, rent and utilities. ACO shall, however, continue any work not so terminated. For the avoidance of doubt, in the event the Agreement is terminated pursuant to Section 34, ACO shall have no responsibility to X-energy under this Section 13.6.

13.7 The rights and obligations of the Parties set forth in this Section 13.7 and Sections 4.11, 8 – 12, 13.4, 13.5, 15 – 19, 24, 26, and 29 – 32, and any right or obligation of the Parties in this Agreement which, by its nature, should survive termination or expiration of this Agreement, will survive any such termination or expiration of this Agreement, and with respect to Confidential Information that constitutes a trade secret under applicable law, the rights and obligations set forth in Section 10 and the Confidentiality Agreement referenced therein, will survive such termination or expiration of this Agreement until, if ever, such Confidential Information loses its trade secret protection other than due to an act or omission of ACO or its affiliates and its or their employees, officers, directors, shareholder, partners, members, managers, agents, independent contractors, service providers, sublicensees, subcontractors, attorneys, accountants, and financial advisors.

14. Independent Contractor.

14.1 It is understood and acknowledged that ACO will provide the Services herein to X-energy in the capacity of an independent contractor and not as an employee or agent of X-energy. ACO shall control the conditions, time, details, and means by which ACO performs the Services. X-energy shall have the right to inspect the work of ACO as it progresses solely for the purpose of determining whether the work is completed according to the terms within the applicable Task Order.

14.2 Neither Party has authority to commit, act for or on behalf of the other Party, or to bind the other Party to any obligation or liability.

14.3 ACO shall not be eligible for and shall not receive any employee benefits from X-energy and shall be solely responsible for the payment of all taxes, FICA, federal and state unemployment insurance contributions, state disability premiums, and all similar taxes and fees relating to its employees.

15. Indemnification.

15.1 ACO shall defend, indemnify and hold harmless X-energy and X-energy's affiliates and their officers, directors, employees, agents, successors and permitted assigns (each, an "**X-energy Indemnitee**") from and against all Losses arising out of or resulting from any third-party claim, suit, action or proceeding (each, an "**Action**") arising out of or resulting from:

15.1.1 bodily injury, death of any person or damage to real or tangible, personal property resulting from the willful, fraudulent or grossly negligent acts or omissions of ACO or its subcontractors in performance of the service; and

15.1.2 ACO's material breach of any ACO representation, warranty or obligation set forth in this Agreement.

15.2 ACO shall defend, indemnify and hold harmless the X-energy Indemnitees from and against all losses based on a claim that any of the services or deliverables or X-energy's receipt or use thereof infringes any intellectual property right of a third party; provided, however, that ACO shall have no obligations under this Section 15.2 with respect to claims to the extent arising out of:

15.2.1 any X-energy materials or any instruction, information, designs, specifications or other materials provided by X-energy to ACO;

15.2.2 use of deliverables in combination with any materials or equipment not supplied to X-energy or specified by ACO in writing, if the infringement would have been avoided by the use of the deliverables not so combined; or

15.2.3 any modifications or changes made to the deliverables by or on behalf of any person other than ACO or its subcontractors.

15.3 X-energy shall defend, indemnify and hold harmless ACO, ACO's affiliates, ACO subcontractors and their officers, directors, employees, agents, successors and permitted assigns (each an ACO "**Indemnitee**") from and against all losses arising out of or resulting from any third-party claim arising out of or resulting from:

15.3.1 bodily injury, death of any person or damage to real or tangible, personal property resulting from the willful, fraudulent or grossly negligent acts or omissions of X-energy, it's agents, or its affiliates; and

15.3.2 X-energy's material breach of any X-energy representation, warranty or obligation in this Agreement.

15.4 X-energy shall defend, indemnify and hold harmless the ACO Indemnitees from and against all losses based on a claim that any of the services or deliverables or ACO's receipt or use thereof infringes any intellectual property right of a third party; provided, however, that X-energy shall have no obligations under this Section 15.4 with respect to claims to the extent arising out of:

15.4.1 any ACO materials or any instruction, information, designs, specifications or other materials provided by ACO to X-energy;

15.4.2 use of deliverables in combination with any materials or equipment not supplied to ACO or specified by X-energy in writing, if the infringement would have been avoided by the use of the deliverables not so combined; or

15.4.3 any modifications or changes made to the deliverables by or on behalf of any person other than X-energy or its subcontractors.

15.5 The Party seeking indemnification hereunder shall promptly notify the indemnifying party in writing of any claim or action and cooperate with the indemnifying party at the indemnifying party's sole cost and expense. The indemnifying party shall immediately take control of the defense and investigation of such claim or action and shall employ counsel of its choice to handle and defend the same, at the indemnifying party's sole cost and expense. The indemnifying party shall not settle any claim or action in a manner that adversely affects the rights of the indemnified party without the indemnified party's prior written consent, which shall not be unreasonably withheld or delayed. The indemnified party's failure to perform any obligations under this Section 15.5 shall not relieve the indemnifying party of its obligations under this Section 15.5 except to the extent that the indemnifying party can demonstrate that it has been materially prejudiced as a result of such failure. The indemnified party may participate in and observe the proceedings at its own cost and expense.

16. LIMITATION OF LIABILITY.

16.1 EXCEPT AS OTHERWISE PROVIDED IN SECTION 16.3, IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY LOSS OF USE, REVENUE OR PROFIT OR LOSS OF DATA OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL OR PUNITIVE DAMAGES WHETHER ARISING OUT OF BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, REGARDLESS OF WHETHER SUCH DAMAGE WAS FORESEEABLE AND WHETHER OR NOT SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

16.2 EXCEPT AS OTHERWISE PROVIDED IN SECTION 16.3, IN NO EVENT WILL EITHER PARTY'S LIABILITY ARISING OUT OF OR RELATED TO THIS AGREEMENT, WHETHER ARISING OUT OF OR RELATED TO BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EXCEED TWO (2) TIMES THE AGGREGATE AMOUNTS PAID OR PAYABLE TO ACO PURSUANT TO THIS AGREEMENT AND ANY APPLICABLE STATEMENT OF WORK.

16.3 The exclusions and limitations in Section 16.1 and Section 16.2 shall not apply to:

16.3.1 damages or other liabilities arising out of or relating to a Party's gross negligence or willful misconduct that results in its failure to comply with its obligations under Section 9 (Intellectual Property);

16.3.2 damages or other liabilities arising out of or relating to a Party's gross negligence or willful misconduct that results in its failure to comply with its obligations under Section 10 (Confidentiality);

16.3.3 a Party's indemnification obligations under Section 15 (Indemnification);

16.3.4 damages or other liabilities arising out of or relating to a Party's gross negligence, willful misconduct or intentional acts;

16.3.5 death or bodily injury or damage to real or tangible personal property resulting from a Party's negligent acts or omissions; and

16.3.6 damages or liabilities in excess of the cap provided for in Section 16.2 to the extent such excess is covered by a Party's insurance.

17. Remedies.

17.1 If a Party violates any material provision of this Agreement, the other Party shall, in addition to any damages to which it is entitled, be entitled to immediate injunctive relief against the offending Party, prohibiting further actions inconsistent with such offending Party's obligations under this Agreement.

17.2 To the extent a Party is required to seek enforcement of this Agreement or otherwise defend against an unsuccessful claim of breach, each Party shall be responsible for their respective attorney's fees and.

17.3 Each Party acknowledges that a breach by a Party of Section 9 (Intellectual Property) or Section 10 (Confidentiality) may cause the non-breaching Party irreparable damages, for which an award of damages would not be adequate compensation and agrees that, in the event of such breach or threatened breach, the non-breaching party will be entitled to seek equitable relief, including a restraining order, injunctive relief, specific performance and any other relief that may be available from any court, in addition to any other remedy to which the non-breaching party may be entitled at law or in equity. Such remedies shall not be deemed to be exclusive but shall be in addition to all other remedies available at law or in equity, subject to any express exclusions or limitations in this Agreement to the contrary. Neither party shall be required to secure or post bond.

17.4 All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either Party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any other agreement between the Parties, or otherwise. Despite the previous sentence, the Parties intend that ACO's exclusive remedy for X-energy's payment breach shall be its right to damages equal to its earned but unpaid fees plus reasonable costs, including reasonable attorney's fees, incurred by ACO in seeking to remedy such breach.

18. Insurance.

18.1 At all times during the Term of this Agreement and for a period of three years thereafter, each Party (the "Insured Party") shall procure and maintain, at its sole cost and expense, at least the following types and amounts of insurance coverage:

18.1.1 Commercial General Liability with limits no less than $1 Million per occurrence and $1 Million in the aggregate, including bodily injury and property damage, which policy will include contractual liability coverage insuring the activities of such insured Party under this Agreement;

18.1.2 Worker's Compensation with limits required by applicable law;

18.1.3 Commercial Automobile Liability with limits no less than $1 Million, combined single limit; and

18.2 All insurance policies required pursuant to Section 18.1 shall:

18.2.1 be issued by insurance companies reasonably acceptable to X-energy, with an A.M. Best's Rating of no less than A-VII;

18.2.2 provide that such insurance carriers give the other Party at least thirty (30) days' prior written notice of cancellation or non-renewal of policy coverage; provided that, prior to such cancellation, the insured Party shall have new insurance policies in place that meet the requirements of this Section 18.2;

18.2.3 waive any right of subrogation of the insurers against the other Party.

18.2.4 provide that such insurance be primary insurance and any similar insurance in the name of and/or for the benefit of the other Party shall be excess and non-contributory; and

18.2.5 name the other Party and the other Party's affiliates, including, in each case, all successors and permitted assigns, as additional insureds.

18.3 Upon the written request of the other Party, the insured Party shall provide the other Party with copies of the certificates of insurance and policy endorsements for all insurance coverage required by Section 18.1, and shall not do anything to invalidate such insurance. This Section 18.3 shall not be construed in any manner as waiving, restricting or limiting the liability of either Party for any obligations imposed under this Agreement (including but not limited to, any provisions requiring a Party hereto to indemnify, defend and hold the other harmless under this Agreement).

19. Non-Solicitation. During the Term of this Agreement, and for a period of twelve (12) months thereafter, neither Party shall, directly or indirectly, in any manner solicit or induce for employment any person who performed any work under this Agreement who is then in the employment of the other Party. A general advertisement or notice of a job listing or opening or other similar general publication of a job search or availability to fill employment positions, including on the internet, shall not be construed as a solicitation or inducement for the purposes of this Section 19, and the hiring of any such employees or independent contractor who freely responds thereto shall not be a breach of this Section 19.

20. Entire Agreement. This Agreement, including and together with any related exhibits, schedules, attachments, and appendices constitutes the entire agreement between the Parties with respect to provision of the Services discussed herein. In the event of any conflict between the terms and provisions of this Agreement and those of any schedule, Exhibit or Task Order, the following order of precedence shall govern: (a) first, this Agreement, exclusive of its Exhibits and schedules, but specifically including **Exhibit B** containing the DOE flow down provisions; (b) second, the applicable Task Order; and (c) third, any Exhibits and schedules to this Agreement; and (d) fourth, the Service Provider Proposal.

21. Notices. All notices, requests, consents, claims, demands, waivers, and other communications under this Agreement (each, a "**Notice**", and with the correlative meaning "**Notify**") must be in writing and addressed to the other Party at its address set forth below (or to such other address that the receiving Party may designate from time to time in accordance with this Section 21). Unless otherwise agreed herein, all Notices must be delivered by personal delivery, nationally recognized overnight courier, certified or registered mail (in each

case, return receipt requested, postage prepaid), or by e-mail or other electronic transmission (with evidence that the recipient has received such e-mail electronic transmission). Except as otherwise provided in this Agreement, a Notice is effective only (a) upon receipt by the receiving Party; and (b) if the Party giving the Notice has complied with the requirements of this Section 21.

Notice to X-energy:

Dr. Peter Pappano X-energy, LLC
7701 Greenbelt Road, Suite 320
Greenbelt, MD 20770
Phone Number: 301-841-8152 Email: ppappano@X-energy.com

Notice to ACO: General Counsel

American Centrifuge Operating, LLC
6901 Rockledge Drive, Suite 800
Bethesda, MD 20817

22. Severability. If any term or provision of this Agreement is found by a court of competent jurisdiction to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction; provided, however, that if any fundamental term or provision of this Agreement. Upon a determination that any term or provision is invalid, illegal, or unenforceable, the Parties shall negotiate in good faith to/the court may modify this Agreement to affect the original intent of the Parties as closely as possible in order that the transactions contemplated hereby be consummated as originally contemplated to the greatest extent possible.

23. Amendments. No amendment to or modification of this Agreement will be effective unless it is in writing, identified as an amendment to or modification of this Agreement, and signed by an authorized representative of each Party.

24. Waiver. No waiver by any Party of any of the provisions of this Agreement shall be effective unless explicitly set forth in writing and signed by the Party so waiving. Except as otherwise set forth in this Agreement, no failure to exercise, or delay in exercising, any right, remedy, power, or privilege arising from this Agreement shall operate or be construed as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power, or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power, or privilege.

25. Assignment. Neither Party shall assign, transfer, delegate, or subcontract any of its rights or obligations under this Agreement without the prior written consent of the other Party, which shall not be unreasonably

withheld. Any purported assignment or delegation in violation of this Section 25 shall be null and void. No assignment or delegation in violation of this Agreement shall relieve a Party of any of its obligations hereunder.

26. Successors and Assigns. This Agreement is binding on and inures to the benefit of the Parties and their respective successors and permitted assigns.

27. No Third-Party Beneficiaries. Other than the obligations to the U.S. Government by virtue of the Cooperative Agreement and DOE flow down requirements, this Agreement benefits solely the Parties and their respective successors and permitted assigns and nothing in this Agreement, express or implied, confers on any third party any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement.

28. Public Statements. Except as otherwise required to comply with any law, rule, regulation, or otherwise as directed by legal counsel, neither Party shall issue or release any announcement, statement, press release or other publicity or marketing materials relating to this Agreement, or otherwise use the other Party's trademarks, service marks, trade names, logos, symbols or brand names, in such instances, without the prior written consent of the other Party, which shall not be unreasonably withheld or delayed.

29. Interpretative Rules. For purposes of this Agreement, (a) the words "include," "includes" and "including" shall be deemed to be followed by the words "without limitation"; (b) the word "or" is not exclusive; and (c) the words "herein," "hereof," "hereby," "hereto" and "hereunder" refer to this Agreement as a whole. Unless the context otherwise requires, references herein: (i) to Sections, Schedules, Exhibits and Task Orders refer to the Sections of, and Schedules, Exhibits and Task Orders attached to this Agreement; (ii) to an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and (iii) to a law means such law as amended from time to time and includes any successor legislation thereto and any regulations promulgated thereunder. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted. Schedules, Exhibits and Task Orders referred to herein shall be construed with, and as an integral part of, this Agreement to the same extent as if they were set forth verbatim herein. The headings in this Agreement are for reference only and shall not affect the interpretation of this Agreement.

30. Choice of Law. This Agreement and all related documents, and all matters arising out of or relating to this Agreement, whether sounding in contract, tort, or statute are governed by, and construed in accordance with, the laws of the State of Maryland, United States of America, without giving effect to the conflict of laws provisions thereof to the extent such principles or rules would require or permit the application of the laws of any jurisdiction other than those of the State of Maryland.

31. Choice of Forum. Each Party irrevocably and unconditionally agrees that it will not commence any action, litigation, or proceeding of any kind whatsoever against the other Party in any way arising from or relating to this Agreement, including all exhibits, schedules, attachments, and appendices attached to this Agreement, and all contemplated transactions, in any forum other than the US District Court for the District of Maryland or, if such court does not have subject-matter jurisdiction, the courts of the State of Maryland, sitting in Prince George’s County, and any appellate court from any thereof. Each Party irrevocably and unconditionally

submits to the exclusive jurisdiction of such courts and agrees to bring any such action, litigation, or proceeding only in such courts. Each Party agrees that a final judgment in any such action, litigation, or proceeding is conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

32. Waiver of Jury Trial. EACH PARTY ACKNOWLEDGES THAT ANY CONTROVERSY THAT MAY ARISE UNDER THIS AGREEMENT, INCLUDING EXHIBITS, SCHEDULES, ATTACHMENTS, AND APPENDICES ATTACHED TO THIS AGREEMENT, IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS AGREEMENT, INCLUDING ANY EXHIBITS, SCHEDULES, ATTACHMENTS, OR APPENDICES ATTACHED TO THIS AGREEMENT, OR THE TRANSACTIONS CONTEMPLATED HEREBY.

33. Counterparts. This Agreement may be executed in counterparts, each of which is deemed an original, but all of which together are deemed to be one and the same agreement. Notwithstanding anything to the contrary in Section 15, a signed copy of this Agreement delivered by facsimile, email, or other means of electronic transmission is deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

34. Force Majeure. Neither Party shall be liable or responsible to the other Party, nor be deemed to have defaulted under or breached this Agreement, except for an obligation to make payments to the other Party, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by or results from acts beyond the impacted Party's control, including, without limitation, the following force majeure events: acts of God, fires, floods, vandalism, sabotage, war, terrorist action, riot, civil commotion, rebellion, general labor stoppage, interruptions in telecommunications or utilities services, national or regional emergency, unexpected acts of any government, regulatory or any other competent authority or compliance with the enactment of any new/unforeseen law or governmental or regulatory order, rule, regulation or direction (each, a "**Force Majeure Event**"). For the avoidance of doubt, without a Force Majeure Event, a Party's financial inability to perform, changes in cost or availability of materials, components or services, market conditions, or supplier actions or contract disputes will not constitute a Force Majeure Event, or excuse performance by a Party under this Section 34. As soon as reasonably practicable after the occurrence of a Force Majeure Event, the Party whose performance is to be affected by such potential Force Majeure Event shall provide prompt written notice of the anticipated duration of such Force Majeure Event. To the extent possible, a Party claiming Force Majeure shall diligently pursue all reasonable means to end the Force Majeure Event and ensure that the effects of any Force Majeure Event are minimized and resume full performance under this Agreement. In the event that the Force Majeure Event continues for a period of ninety (90) days following written notice given pursuant to this Section 34, either Party may terminate this Agreement upon thirty (30) days' notice. Notwithstanding anything to the contrary in this Agreement, in the event either Party delivers notice of termination of the Agreement in accordance with this Section 34, the terminating Party shall incur no additional obligations or penalties under this Agreement, to the other Party, except for any outstanding payment obligations.

Remainder of Page Intentionally Left Blank; Signature Page Follows on Next Page

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date by their respective officers thereunto duly authorized.

X-ENERGY LLC

By /s/ Kim Lester

Name: Kim Lester

Title: Director, Contracts and Procurement Date: 11/29/2018

American Centrifuge Operating, LLC

By /s/ Larry B. Cutlip

Name: Larry B. Cutlip

Title: SVP, Field Operations

EXHIBIT A

Advanced Nuclear Technology Development Cooperative Agreement No. DE-NE0008475

by and between X-energy and the U.S. Department of Energy

See Attached

ASSISTANCE AGREEMENT

1. Award No.	2. Modification No.	3. Effective Date	4. CFDA No.
DE-NE0008745		08/24/2018	81.121

5. Awarded To	6. Sponsoring Office	7. Period of Performance
X ENERGY, LLC Attn: HARLAN BOWERS 7701 GREENBELT RD STE 320 GREENBELT MD 207706510	Office of Nuclear Energy NE-1 U.S. Department of Energy 1000 Independence Avenue, S.W. Washington DC 20585	***** through *****

8. Type of Agreement	9. Authority	10. Purchase Request or Funding Document No.
Grant X Cooperative Agreement Other		18NE000851

11. Remittance Address	12. Total Amount	13. Funds Obligated
X ENERGY, LLC Attn: X ENERGY, LLC 7701 GREENBELT RD STE 400 GREENBELT MD 20770	Govt. Share: ***** Cost Share : ***** Total : *****	This action: ***** Total : *****

14. Principal Investigator	15. Program Manager	16. Administrator
Dr. Peter Pappano	WILLETTIA D. AMOS Phone: 208-526-4097	Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue MS 1221 Idaho Falls ID 83415

17. Submit Payment Requests To	18. Paying Office	19. Submit Reports To
OR for Oak Ridge/OSTI U.S. Department of Energy Oak Ridge Office Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831	OR for Idaho U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831	See attachment B3

20. Accounting and Appropriation Data

X-Energy iFOA

21. Research Title and/or Description of Project

DESIGN AND LICENSE APPLICATION DEVELOPMENT FOR TRISO-X: AS CROSS-CUTTING HIGH ASSAY LOW ENRICHED URANIUM FUEL FABRICAITON FACILITY

<table>
<tr><th colspan="2">For the Recipient</th><th colspan="2">For the United States of America</th></tr>
<tr><td colspan="2">22. Signature of Person Authorized to Sign</td><td colspan="2">25. Signature of Grants/Agreements Officer
Signature on File</td></tr>
<tr><td>23. Name and Title</td><td>24. Date Signed</td><td>26. Name of Officer
Suzette M. Olson</td><td>27. Date Signed
08/24/2018</td></tr>
</table>

CONTINUATION SHEET

NAME OF OFFEROR OR CONTRACTOR
X ENERGY, LLc

ITEM NO. SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT
(A) (B) (C) (D) (E) (F)

QUANTITY

UNIT

UNIT PRICE

AMO

DUNS Number: 078846872
Award as a result of Funding Opportunity Announcement (FOA) DE-FOA-0001817. This cooperative agreement is made as a result of the applicant's submission selected under FOA DE-FOA-0001817.

The primary mission of the Office of Nuclear Energy (NE) is to advance nuclear power as a resource capable of meeting the nation's energy, environmental, and national security needs. This is accomplished by resolving technical, cost, safety, proliferation resistance, and security barriers through research, development, and demonstration, as appropriate. The development of improved advanced nuclear reactor designs and technologies, as well as improvements in the operation of the existing domestic fleet of nuclear power plants, is the most important aspect of assuring that nuclear power will be a viable option for the United States (U.S.) energy needs for generations to come.

The fundamental premise behind this FOA is to provide a direct vehicle to support innovative, domestic nuclear industry-driven designs and technologies that have high potential to improve the overall economic outlook for nuclear power in the U.S. The investment provided by the Government will accelerate development of these designs and technologies so that the existing domestic fleet of nuclear power plants remains viable and the most mature new, advanced U.S. designs can be deployed as early as mid-to-late 2020s, and be globally competitive. These advanced reactor designs and technologies will further the state of the U.S. commercial nuclear capability by improving the competitiveness of nuclear power and promoting its continued contribution to meeting our nation's economic, energy security, and environmental challenges.
The FOA is envisioned to provide support for
The revitalization and expansion of the U.S. nuclear industry by encouraging growth of a pipeline for advanced nuclear reactors, specifically through the employment of key private-public partnerships.

The objective of this FOA is to support innovation and competitiveness of the U.S. Continued ...

nuclear industry through cost-shared,

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-NE0008745	PAGE 3 OF 3

NAME OF OFFEROR OR CONTRACTOR
X ENERGY, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	cross-cutting basic/fundamental, applied R&D, and demonstration/commercial application R&D activities for all aspects of existing and advanced reactor development. In general, NE is seeking unique/new ideas that will improve the existing fleet, the potential for future U.S. nuclear power deployment, U.S. nuclear technology leadership, and U.S. industry competiveness. It is also the intent of the Department that this FOA will serve to improve the outlook for manufacturing enterprise development in the U.S. Special Award Requirements 1. No Cost Time Extensions. Unilateral no cost time extensions by the awardee will NOT be permitted under this award. The awardee must request any extension from DOE at least 3 months prior to the award's period of performance end date, unless otherwise agreed to by DOE. Any no cost time extension must receive prior written approval from the DOE Contracting Officer. 2. Direct Cost Funds Transfers. The awardee is restricted from transferring funds between direct cost categories; the cumulative amount of such transfers must not exceed *****% of the total budget as last approved by DOE. For funds transfers greater than 10% the recipient is required to obtain DOE prior approval. Directly Incorporated Attachments: A. Special Terms and Conditions B1. Intellectual Property Provisions B2. General Research Award Terms and Conditions B3. Federal Assistance Reporting Checklist B4. Budget Pages ASAP: NO: STD IMMEDIATE Extent Competed: COMPETED Davis-Bacon Act: NO PI: Dr. Peter Pappano Fund: 05350 Appr Year: 2018 Allottee: 02 Report Entity: 500201 Object Class: 25233 Program: 2720986 Project: 0000000 WFO: 0000000 Local Use: 0000000				

EXHIBIT B

GENERAL FLOW DOWN REQUIREMENTS

FOR SUPPLIERS UNDER SUPPLY CONTRACTS PAID WITH FEDERAL OR COST SHARE FUNDS

UNDER DEPARTMENT OF ENERGY AWARD NO. DE-NE0008472
(EXCLUDING INTELLECTUAL PROPERTY PROVISIONS)

1. Supplier shall not purchase and charge the cost of real property or equipment to X-energy or attempt to contribute in kind such costs for performance under this Agreement unless X-energy has expressly approved the purchase in writing. All equipment purchased with federal or cost share funds under the above- referenced award (the "**Award**") is subject to the requirements of 2 C.F.R. § 200.313.

2. Any surplus supplies for which the cost is reimbursed by X-energy exceeding $5,000 in total aggregate value acquired in connection with, but ultimately not needed for performance under this Agreement are subject to the requirements of 2 C.F.R. § 200.314. At the conclusion of this Agreement, Supplier shall work with X- energy on the development of a disposition plan for such supplies that meets the requirements of 2 C.F.R. § 200.314.

3. No deliverables, reports or submittals that are to be provided to the U.S. Department of Energy (DOE) under this Agreement may contain any protected Personally Identifiable Information (PII). PII is any information maintained by the Supplier about an individual, including but not limited to, education, financial transactions, medical history and criminal or employment history, and information that can be used to distinguish or trace an individual's identity, such as his/her name, social security number, date and place of birth, mother's maiden name, biometric data, etc., and including any other personal information that is linked or linkable to a specific individual.

4. Supplier acknowledges that it is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased under the Award, should be American-made.

5. Supplier shall obtain prior X-energy approval for all subcontracts that will be directly charged to this Agreement in excess of $5 million, including all options and/or material modifications thereto. Supplier shall notify X-energy of any anticipated subcontracts estimated at $5 million or more, including all options and modifications.

6. Supplier may only charge costs under this Agreement that are reasonable in nature and amount for the work done. Costs must be ordinary and necessary in connection with the work performed and reflective of charges that would result from arm's length bargaining in a competitive business.

7. Upon request of X-energy or DOE, Supplier shall provide documentary support for its pricing of goods or services provided to X-energy under this Agreement. For ACO labor, documentary support shall be provided upon request to DOE.

8. Supplier shall maintain records related to its performance under this Agreement for not less than three years from final payment. Supplier agrees to cooperate with X-energy to provide DOE access to any records that are pertinent to this Agreement, in order to make audits, examinations, excerpts, transcripts and copies of such documents. This right also includes reasonable access to Supplier's personnel for the purpose of interview and discussion related to such documents.

9. Supplier certifies that neither it nor its principals are debarred or suspended from participating under any federal contract or financial assistance award by any department or agency of the U.S. Government. Prior to entering into any subcontract, Supplier shall confirm that its first-tier subcontractors are not excluded or disqualified from doing business with the Federal government.

10. Supplier shall not publish progress reports, results or summaries of technical work conducted under the DOE Cooperative Agreement without X-energy's prior written approval.

11. Supplier shall obtain any required permits and comply with all applicable federal, state, and municipal laws, codes, and regulations for work performed under this Agreement.

12. Supplier shall notify X-energy of any potentially National Security classifiable results originating from this Agreement.

13. Supplier shall notify X-energy prior to performing work under this Agreement outside of the United States or subcontracting work to be performed outside the United States.

14. Supplier is responsible for maintaining the integrity of research of any kind under this Agreement, including the prevention, detection, and remediation of research misconduct, and the conduct of inquiries, investigations, and adjudication of allegations of research misconduct.

15. Supplier is encouraged to use the metric system to the extent practicable and economically feasible.

16. With respect to the performance of any portion of the work under this Agreement that is to be performed at a DOE-owned or controlled site, Supplier agrees to comply with all applicable State and Federal Environmental, Safety & Health (ES&H) regulations and with all other applicable ES&H requirements of the operator of such site. Prior to the performance of any work at a DOE-owned or controlled site, Supplier, in consultation with X- energy, shall contact the site facility manager for information on DOE and site-specific ES&H requirements. The Supplier shall apply this provision to its subcontractors performing work at a DOE-owned or controlled site.

17. Upon request and with 20 days written notice, Supplier shall provide X-energy and DOE access to any real property or equipment purchased for the performance of this Agreement using federal or cost share funds for purposes of inventory.

18. Upon request and with 20 days written notice, Supplier shall provide X-energy and DOE access to its facilities to conduct a program audit, the reasonable cost of which shall be reimbursed by X-energy, which cost shall be discounted and the fair market value of such discount included as an in-kind contribution.

19. As applicable, Supplier shall clearly label any business confidential information it provides to X-energy or to DOE.

20. Before directly charging any costs to this Agreement related to participation in any conference, Supplier shall obtain X-energy's written confirmation that such conference is directly and programmatically related to the purpose of the Award.

21. Supplier agrees to cooperate with X-energy in the preparation of any reports required by DOE under X- energy's cooperative agreement that relate to work performed by Supplier under this Agreement. X-energy shall reimburse Supplier for its reasonable cost incurred supporting X-energy, which cost shall be discounted and the fair market value of such discount included as an in-kind contribution.

22. No federal or cost share funds provided to Supplier under this Agreement shall be expended, directly, or indirectly, to influence congressional action on any legislation or appropriations matters pending before Congress.

EXHIBIT C

ACO LABOR RATES DATED 11/01/18

		*****	*****	*****	
	Composite Rate Oct 18 – Nov 19	**OH**	**G&A**	**Fee**	**Total Rate**
Position	0	0	0	0	0
Program Management-HQ	*****	*****	*****	*****	*****
Regulatory	*****	*****	*****	*****	*****
Project Controls	*****	*****	*****	*****	*****
Transportation	*****	*****	*****	*****	*****
Procurement-AC	*****	*****	*****	*****	*****
Quality Assurance	*****	*****	*****	*****	*****
Security - Cyber	*****	*****	*****	*****	*****
Security Mgr - Personnel	*****	*****	*****	*****	*****
Security Mgr - Building	*****	*****	*****	*****	*****
Security - Building	*****	*****	*****	*****	*****
Project Manager-OR	*****	*****	*****	*****	*****
Planners / WC	*****	*****	*****	*****	*****
Program Manager - XE	*****	*****	*****	*****	*****
Maintenance Mgr - Building	*****	*****	*****	*****	*****
Maintenance - Building	*****	*****	*****	*****	*****
Engineer - Electrical / I&C	*****	*****	*****	*****	*****
Engineer - Design	*****	*****	*****	*****	*****
Engineer - General	*****	*****	*****	*****	*****
Engineer - Manufacturing	*****	*****	*****	*****	*****
Training	*****	*****	*****	*****	*****
Operations Manager	*****	*****	*****	*****	*****
Operations Tech	*****	*****	*****	*****	*****

Contractor Rates

Contractor	Hourly Rate	Hourly Rate
		$ -
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****
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*****	*****	*****

EXHIBIT D

NONDISCLOSURE AGREEMENT BETWEEN X-ENERGY AND CENTRUS DATED MAY 5, 2017, AS AMENDED JANUARY 18, 2018

NONDISCLOSURE AGREEMENT

This Agreement, effective as of May 5, 2017 (the "Effective Date"), made by and between **X Energy, LLC** having a principal place of business at 7701 Greenbelt Road, Suite 320, Greenbel,t MD 20770 ("X Energy"), and **Centrus Energy Corp.** having a principal place of business at 6901 Rockledge Dr., Suite 800, Bethesda, MD 20817 ("Centrus Energy") (each referred to herein as a "Party").

It is anticipated that the disclosing Party (the "DISCLOSER") may from time to time disclose to the receiving Party (the "RECIPIENT") certain technical and/or business information which the DISCLOSER regards as proprietary and/or confidential. The purpose of this Agreement is to set forth the terms and conditions under which such information will be maintained in confidence by the RECIPIENT. In consideration of DISCLOSER entering into discussions with RECIPIENT about DISCLOSER potentially retaining RECIPIENT to perform services, RECIPIENT agrees as follows:

1. "Proprietary Information," as used herein, shall mean non-public technical and/or business information which is disclosed by the DISCLOSER to the RECIPIENT during the term of this Agreement and which DISCLOSER regards as proprietary and/or confidential.

2. DISCLOSER will mark any *technical* Proprietary Information that can be marked (such as in written form) with a "Proprietary," "Confidentia,l" or similar legend. DISCLOSER will not mark any *financial/business* Proprietary Information because such information in written or other tangible form will be presumed to be proprietary and/or confidential. RECIPIENT will treat all technical or financial/business information disclosed in oral form by DISCLOSER (such as during oral discussions) as Proprietary Information unless RECIPIENT confirms with DISCLOSER in writing that the information is not Proprietary Information.

3. RECIPIENT agrees that it shall retain such Proprietary Information in strict confidence, making no commercial uses of such Proprietary Information. The RECIPIENT agrees to use the same care and discretion as the RECIPIENT uses with respect to similar information of its own, but not less than reasonable care, to avoid unauthorized disclosure, publication, dissemination or use of Proprietary Information received hereunder.

4. The primary contact person for each Party, for the purpose of coordinating the flow of Proprietary Information, and for disclosure authorization, shall be:

For: **X Energy, LLC** Technical: Pete Pappano

Contractual: Kim Lester

For: **Centrus Energy Corp.** Technical: Larry B

Cutlip Contractual: Larry B Cutlip

5. RECIPIENT covenants and agrees that it will receive and use the Proprietary Information only for the authorized uses identified by the DISCLOSER ("Authorized Uses").

6. RECIPIENT agrees that it shall not disclose Proprietary Information to any third party, except to those of RECIPIENT's employees (plus, employees of any parent, affiliate or subsidiary), directors, officers, managers, professional advisors (including, but not limited to, lawyers, bankers, financial

consultants, and accountants), or creditors or guarantors (collectively, the "Representatives") who (i) have a bona fide need to know the Proprietary Information; (ii) are advised of the proprietary nature of the information; and (iii) except where such Representatives are U.S. government agencies, are bound, through a written agreement, to the terms of this Agreement or by a legally enforceable code of professional responsibility to protect the confidentiality of the Proprietary Information, without the express written authorization of an officer of the DISCLOSER. RECIPIENT further agrees that RECIPIENT will require each employee having access to Proprietary Information to agree to be bound by the terms of this Agreement prior to the disclosure of Proprietary Information to that employee. Notwithstanding the foregoing, In the event that a RECIPIENT is required by law, rule, regulation, legal process, court order, administrative demand or appropriate governmental authority to disclose the DISCLOSER'S Proprietary Information (whether on a confidential, privileged or other basis), the RECIPIENT shall, to the extent permitted by law, immediately notify the DISCLOSER and, upon request, cooperate with the DISCLOSER'S counsel to seek relief from the requested disclosure or to secure confidential treatment and minimization of the Proprietary Information to be disclosed. To the extent permitted by applicable law, the DISCLOSER shall have the right to take immediate possession of the Proprietary Information disclosed to RECIPIENT to revise such Proprietary Information to minimize its disclosure.

7. RECIPIENT shall not be responsible for disclosure of any Proprietary Information if such information (as supported by RECIPIENT's written records):

(i) Is or was publicly available at the time it was disclosed or is subsequently made available to the general public without restriction by the DISCLOSER or by disclosure by RECIPIENT in violation of this Agreement;
(ii) is furnished by the DISCLOSER to the U.S. Government with unlimited rights;
(iii) was known to or possessed by RECIPIENT at the time of disclosure;
(iv) was independently developed by RECIPIENT or RECIPIENT's employees or third parties;
(v) is used or disclosed with the prior written consent of the DISCLOSER; or
(vi) becomes known to RECIPIENT, on a non-confidential basis from a source other than DISCLOSER, without breach of an obligation of confidentiality or this Agreement by RECIPIENT.

8. The RECIPIENT shall only make such copies of the Proprietary Information as are reasonable and necessary in carrying out the Authorized Uses. Any such copies shall retain the proprietary markings, as applicable, from the original. The RECIPIENT shall promptly return or destroy all such copies to the DISCLOSER upon request, with the exception of one legal copy, which may be retained for archive purposes only. The RECIPIENT shall maintain the confidentiality of all Proprietary Information with regard to any copies.

9. Upon discovery of any inadvertent disclosure or use, the RECIPIENT shall notify DISCLOSER immediately and shall take all reasonable measures to prevent future inadvertent disclosure or use.

10. In the event of any breach of this Agreement, DISCLOSER may suffer irreparable harm and have no adequate remedy at law. In such event or the threat of any such event, DISCLOSER will be entitled to seek equitable relief, including but not limited to injunctive relief or specific performance, in addition to reasonable monetary damages, if any. The undersigned agree that the prevailing Party in any action brought to enforce the legal rights provided herein shall be entitled to full reimbursement of its costs (including reasonable attorneys' fees) in such action. RECIPIENT also agrees to waive any requirement for the securing or posting of any bond by the DISCLOSER in an action seeking such a remedy.

11. The protections afforded to the Confidential Information and Confidential Materials under this Agreement are in addition to, and not in lieu of, the protections afforded under any applicable trade secrets laws, including the Uniform Trade Secrets Act.

12. RECIPIENT acknowledges that this Agreement is subject to compliance with applicable United States laws, regulations, and/or orders. These laws, regulations, and orders include, but are not limited to, those that relate to the export of nuclear materials, equipment, software, and technology, such as the
U.S. Department of Energy ("DOE") regulations found in 10 C.F.R. Part 810, the U.S. Nuclear Regulatory Commission regulations in 10 C.F.R. Part 110, and the U.S. Department of Commerce's Export Administration Regulations found in 15 C.F.R. Part 730 *et seq.,* as may be amended (collectively, "Export Control Laws").

(i) RECIPIENT agrees to comply with all Export Control Laws. RECIPIENT shall not export, reexport, transfer or retransfer, directly or indirectly, any Proprietary Information, except as permitted by such Export Control Laws.

(ii) Notwithstanding anything to the contrary in this Agreement, and in order to ensure compliance with Export Control Laws, RECIPIENT shall not, absent prior written approval by DISCLOSER:

a. use, directly or indirectly, Proprietary Information in any application involving a military use, missile technology, nuclear proliferation/nuclear explosive device, or chemical and biological weapons proliferation, and;

b. disclose or furnish Proprietary Information to any Foreign Nationals who are of a different nationality than the RECIPIENT (including RECIPIENT's employees who are of a different nationality than RECIPIENT, as applicable). For purposes of this paragraph, "Foreign National" means any person who is neither a U.S. citizen, a "Lawful Permanent Resident" *(i.e.,* Green Card holder, 8 USC§ 1101(a)(20)), nor other "Protected Individual" under the Immigration and Naturalization Act (8 USC §1324b(a)(3)) designated an asylee, refugee, or a temporary resident under amnesty provisions. A Foreign National also means any foreign corporation, business association, partnership, or any other entity or group that is not incorporated to do business in the U.S. This restriction applies to written and oral information and guidance which may be provided by DISCLOSER and applies to any information provided by any contractor, or subcontractor to DISCLOSER or any other person acting on behalf of DISCLOSER.

(iii) All tangible objects, such as drawings, reports, programs or documents, which constitute and/or contains or may contain Export Controlled Information shall be marked **"Export Controlled Information" or "Information Contained Within May Contain Export Controlled Information"** or such other markings as required or permitted by DOE guidance. Markings inadvertently omitted from export controlled Proprietary Information when disclosed to a person or entity shall be applied by such person or entity promptly when requested by the DISCLOSER, and such export controlled Proprietary Information shall thereafter continue to be treated as export controlled information under the terms of this Agreement.

13. In accordance with the Defend Trade Secrets Act of 2016, any individual performing work for Centrus, whether as an individual, contractor or consultant, will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (a) is made (i) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. Further, if such an individual files a lawsuit for retaliation by an employer for reporting a suspected violation of law, he or she may disclose the employer's trade secrets to his or her attorney and use the trade secret information in the court proceeding if such individual: (x) files any document containing the trade secret under seal; and (y) does not disclose the trade secret, except pursuant to court order. Except to the extent notice of the foregoing immunities has already been given to such individuals, X Energy shall notify its employees, contractors or employees receiving Proprietary Information under this Agreement, of such immunities.

14. 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.

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. {Note: This Paragraph added effective January 18, 2018}

15. All notices to be given to either Party hereunder shall be sent to the following addresses: If to X Energy:
X Energy LLC
Address: 7701 Greenbelt Road, Suite 320
Greenbelt, MD 20770 ATTN: Kim Lester
Telephone: 301-658-2325 klester@x-energy.com

If to Centrus Energy:
Centrus Energy Corp.
6901 Rockledge Drive, Suite 800
Bethesda, Maryland 20817-1867 ATTN: General Counsel Telephone: (301) 564-3352 scottd@centrusenergy.com

Any notice, request, demand, claim or other communication related to this Agreement must be in writing. Notices shall be sufficient if delivered by hand, registered mail (return request requested), overnight courier or electronic mail. Notices shall be effective upon actual receipt thereof. The Party to whom notice is to be given may change the address for the giving of notices set forth above by delivering notice of such change to the other Party.

16. Nothing in this Agreement shall, by express grant, implication, estoppel or otherwise, create in the RECIPIENT any right, title, interest, or license in or to the inventions, patents, technical data, computer software, software documentation or other intellectual property of the DISCLOSER.

17. No waiver or modification of this Agreement will be binding upon either Party unless made in writing and signed by a duly authorized representative of such Party, and no failure or delay in enforcing any right will be deemed a waiver.

18. This Agreement shall be governed by the laws of the State of Maryland, without making reference to its conflicts of laws provisions.

19. RECIPIENT may not assign or otherwise transfer this Agreement or any of its rights and obligations hereunder to any third party, including to a legally recognized successor in interest to all or substantially all of the RECIPIENT'S assets, without DISCLOSER's prior written consent, which consent will not be unreasonably withheld. This Agreement shall benefit and be binding upon the successors and assigns of the Parties hereto.

20. DISCLOSER warrants that it has the right to disclose the Proprietary Information for the purposes of this Agreement.

21. IN PROVIDING ANY PROPRIETARY INFORMATION HEREUNDER, DISCLOSER MAKES NO REPRESENTATION, EITHER EXPRESSED OR IMPLIED, AS TO THE INFORMATION'S ADEQUACY, ACCURACY, SUFFICIENCY OR FREEDOM FROM DEFECT OF ANY KIND, INCLUDING FREEDOM FROM ANY PATENT INFRINGEMENT THAT MAY RESULT FROM THE USE OF SUCH PROPRIETARY INFORMATION, NOR SHALL DISCLOSER INCUR ANY RESPONSIBILITY OR OBLIGATION WHATSOEVER BY REASON OF SUCH PROPRIETARY INFORMATION, EXCEPT AS PROVIDED IN THIS AGREEMENT.

22. The Term of this Agreement will be two (2) years from the Effective Date. The Term can be extended if the Parties enter into a services contract that incorporates by reference this Agreement, in which case the Term of this Agreement will be the duration of that services contract.

23. RECIPIENT'S obligations with respect to handling and protecting the Proprietary Information under this Agreement survive the Term of this Agreement.

24. If any term or provision of this Agreement is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction.

25. This Agreement contains the entire Agreement between the Parties concerning the subject matter hereof and supersedes any previous understandings, commitments or agreements, oral or written.

26. This Agreement may be executed in two (2) 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, facsimiles 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, facsimile or form of electronic signature. A signed copy of this Agreement delivered by facsimile, email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[Remainder of Page Intentionally Left Blank; Signature Page Follows on Next Page]

AGREED:

For: Centrus Energy Corp.

Kim Lester

By: Dennis J. Scott

For: X Energy, LLC

By: Kim Lester

(Title) Contracts Manager

(Title) Senior Vice President, General Counsel, Chief Compliance Officer, and Corporate Secretary

(Date) 01/18/2018 *(Date) January 18, 2018*

DBI/ 87313128.3

<u>EXHIBIT E</u>

X-ENERGY COMPETITORS

LIST OF X-ENERGY COMPETITORS COVERED BY NON-COMPETE

Reactor Competitors

*****

Fuel Supply Competitors

*****

EXHIBIT 21

SUBSIDIARIES OF CENTRUS ENERGY CORP.

Name of Subsidiary	State of Incorporation
United States Enrichment Corporation	Delaware

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-200439 and 333-218536) of Centrus Energy Corp. of our report dated April 1, 2019 relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland
April 1, 2019

EXHIBIT 31.1

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.

April 1, 2019

/s/ Daniel B. Poneman

Daniel B. Poneman

President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Marian K. Davis, 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.

April 1, 2019

/s/ Marian K. Davis

Marian K. Davis

Senior Vice President, Chief Financial Officer and Treasurer

EXHIBIT 32.1

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, 2018, 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 Marian K. Davis, Senior Vice President, Chief Financial 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.

April 1, 2019	/s/ Daniel B. Poneman
	Daniel B. Poneman
	President and Chief Executive Officer
April 1, 2019	/s/ Marian K. Davis
	Marian K. Davis
	Senior Vice President, Chief Financial Officer and Treasurer