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

9 /

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Centrus Energy Corp.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

52-2107911

(IRS Employer Identification No.)

6901 Rockledge Drive Suite 800 Bethesda, MD 20817

(Address of registrant's principal executive offices)

Centrus Energy Corp.
2014 Equity Incentive Plan, as amended
(Amendment Effective May 31, 2017)
(Full title of the Plan)

Stephen S. Greene Senior Vice President, Chief Financial Officer and Treasurer Centrus Energy Corp. 6901 Rockledge Drive

Suite 800 Bethesda, MD 20817 (301) 564-3200

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Michele C. Kloeppel, Esq. Thompson Coburn LLP One US Bank Plaza Suite 3500 St. Louis, Missouri 63101 Phone: (314) 552-6000 Fax: (314) 552-7000

- I I CI	- A 1 . 101			
☐ Large accelerated filer	□ Accelerated filer			
☐ Non-accelerated filer	Smaller reporting company			
	☐ Emerging growth company			
	check mark if the registrant has elected not to use the extended transition period for complying with a led pursuant to Section 7(a)(2)(B) of the Securities Act. CALCULATION OF REGISTRATION FEE			

Incentive Plan, by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an

(2) Estimated solely for the purposes of computing the registration fee pursuant to the provisions of Rule 457(c) and (h) under the Securities Act, based upon the average

increase in the number of the outstanding shares of Common Stock of the Company.

of the high and low sale prices of the Common Stock as reported on the NYSE MKT, LLC on June 2, 2017.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

REGISTRATION OF ADDITIONAL SECURITIES

This Registration Statement is being filed by Centrus Energy Corp. (the "Company") to register two hundred thousand (200,000) additional shares (the "Additional Shares") of the Company's common stock, par value \$0.10 per share ("Common Stock") issuable under the Company's Centrus Energy Corp. 2014 Equity Incentive Plan, as amended from time to time (the "Incentive Plan"). The Additional Shares are being registered in addition to the Common Stock previously registered for issuance under the Incentive Plan by a Registration Statement on Form S-8 filed with the Securities and Exchange Commission (the "SEC") on November 21, 2011, Registration File No. 333-200439 (the "Prior Registration Statement").

This Registration Statement relates to securities of the same class as that to which the Prior Registration Statement relates, and is submitted in accordance with General Instruction E to Form S-8 regarding registration of additional securities. Pursuant to such instruction, the contents of the Prior Registration Statement are incorporated by reference and made part of this Registration Statement.

Item 3. Incorporation of Certain Documents by Reference

The following documents filed by the Company with the SEC are incorporated herein by reference:

- (i) The Company's Annual Report on Form 10-K for the year ended December 31, 2016, filed March 31, 2017;
- (ii) The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed May 10, 2017;
- (iii) The Company's Current Reports on Form 8-K, filed April 27, 2017, May 1, 2017, May 10, 2017 and June 2, 2017; and
- (iv) The description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A filed on September 30, 2014, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be made a part hereof from the date of filing of such documents. Any statements contained herein or in a document incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in a subsequently filed document incorporated herein by reference modifies or supersedes such document. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Under no circumstances will any information filed under Items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

Item 8. Exhibits.

The following Exhibits are filed as part of this Registration Statement:

Exhibit Number	Exhibit
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 6, 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 Registration Statement on Form 8-A filed with the Securities and Exchange Commission on February 14, 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 6, 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 6, 2016).
4.8	First Amendment to Section 382 Rights Agreement by and between Centrus Energy Corp., Computershare Trust Company, N.A. and Computershare Inc., dated on or about February 14, 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).
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4.11	New Notes Note Subordination Agreement by and among United States Enrichment Corporation and Delaware Trust Company, as Trustee, dated as of February 14, 2017 (incorporated by reference to Exhibit 4.3 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017).
4.12	Pari Passu Intercreditor Agreement by and among United States Enrichment Corporation and Delaware Trust Company, as Trustee, dated as of February 14, 2017 (incorporated by reference to Exhibit 4.4 of the Company's Current Report on Form 8-K, filed with the SEC on February 15, 2017).
4.13	Centrus Energy Corp. 2014 Equity Incentive Plan, as amended (incorporated by reference to Appendix C to the Company's Definitive Proxy Statement on Schedule 14A filed on April 19, 2017).
5.1*	Opinion of Thompson Coburn LLP regarding legality
23.1*	Consent of PricewaterhouseCoopers LLP
23.2*	Consent of Thompson Coburn LLP (included in the opinion filed as Exhibit 5.1)
24.1	Power of Attorney (included on the signature page hereof)
* Filed herewith.	

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Bethesda, Maryland, on June 6, 2017.

Centrus Energy Corp.

By: /s/ Stephen S. Greene Name: Stephen S. Greene

Title: Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial

Officer)

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, we, the undersigned officers and directors of Centrus Energy Corp., a Delaware corporation, hereby severally and individually constitute and appoint Stephen S. Greene and Dennis J. Scott, and each of them (with full power to act alone and with full power of substitution and resubstitution), the lawful attorneys and agents of each of us to execute in the name, place and stead of each of us (individually and in any capacity stated below) any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 and all instruments necessary or advisable in connection therewith and to file the same with the Securities and Exchange Commission, the said attorney and agent to have the power to act with or without the others and to have full power and authority to do and perform in the name and on behalf of each of the undersigned every act whatsoever necessary or advisable to be done in the premises as fully and to all intents and purposes as any of the undersigned might or could do in person, and we hereby ratify and confirm our signatures as they may be signed by our said attorneys and agents to any and all such amendments and instruments.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Daniel B. Poneman	President, Chief Executive Officer	June 6, 2017
Daniel B. Poneman	and Director (Principal Executive Officer)	
/s/ Stephen S. Greene	Senior Vice President, Chief Financial Officer	June 6, 2017
Stephen S. Greene	and Treasurer (Principal Financial Officer)	
/s/ John C. Dorrian	Controller and Chief Accounting Officer	June 6, 2017
John C. Dorrian	(Principal Accounting Officer)	
/s/ Mikel H. Williams	Chairman of the Board and Director	June 6, 2017
Mikel H. Williams		
/s/ Michael Diament	Director	June 6, 2017
Michael Diament		
/s/ W. Thomas Jagodinski	Director	June 6, 2017
W. Thomas Jagodinski		
/s/ Patricia J. Jamieson	Director	June 6, 2017
Patricia J. Jamieson		
/s/ William J. Madia	Director	June 6, 2017
William J. Madia		
/s/ Hiroshi Sakamoto	Director	June 6, 2017
Hiroshi Sakamoto		

Exhibit Index

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23.2*	Consent of Thompson Coburn LLP (included in the opinion filed as Exhibit 5.1)
24.1	Power of Attorney (included on the signature page hereof)

June 6, 2017

Centrus Energy Corp. 6901 Rockledge Drive Suite 800 Bethesda, MD 20817

Re: Registration Statement on Form S-8 for an additional two hundred thousand (200,000) shares of Centrus Energy Corp. Class A common stock, par value \$0.10 per share, for issuance under the 2014 Equity Incentive Plan, as amended.

Ladies and Gentlemen:

With reference to the Registration Statement on Form S-8 (the "Registration Statement") to be filed by Centrus Energy Corp., a Delaware corporation (the "Company"), on June 6, 2017, with the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended, relating to the proposed issuance by the Company of up to an additional two hundred thousand (200,000) shares (the "Additional Shares") of the Company's Class A common stock, par value \$0.10 per share, pursuant to the 2014 Equity Incentive Plan, as amended from time to time (the "Plan"), we have examined such corporate records of the Company, such laws and such other information as we have deemed relevant, including the Company's Amended and Restated Certificate of Incorporation, Third Amended and Restated By-Laws and statements we have received from officers and representatives of the Company. In delivering this opinion, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to the originals of all documents submitted to us as certified, photostatic or conformed copies, the authenticity of originals of all such latter documents, and the correctness of statements submitted to us by officers and representatives of the Company.

Based solely on the foregoing, we are of the opinion that the Additional Shares to be issued by the Company pursuant to the Plan have been duly authorized and, when issued by the Company in accordance with the Plan, will be legally issued, fully paid and non-assessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ THOMPSON COBURN LLP

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 31, 2017 relating to the financial statements, which appears in Centrus Energy Corp.'s Annual Report on Form 10-K for the year ended December 31, 2016.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland June 6, 2017