

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

FORM 10-Q/A
Amendment No. 1

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

For the quarter ended June 30, 2010

OR

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

Commission file number 1-14287

USEC Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation)

52-2107911
(I.R.S. Employer Identification No.)

Two Democracy Center
6903 Rockledge Drive, Bethesda, Maryland 20817
(301) 564-3200

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes No

As of July 15, 2010, there were 114,190,954 shares of Common Stock issued and outstanding.

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EXPLANATORY NOTE

This Amendment No. 1 on Form 10-Q/A of USEC Inc. (the “Company”) amends the Company’s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2010, as filed with the Securities and Exchange Commission on August 4, 2010 (the “Form 10-Q”), solely to furnish the Interactive Data Files as Exhibit 101 to the Form 10-Q, as required by Rule 405 of Regulation S-T. No other changes have been made to the Company’s Form 10-Q. The information contained in this Amendment No. 1 does not reflect events occurring subsequent to the filing of the Form 10-Q.

Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

Item 6. Exhibits

- 3.1 Amended and Restated Bylaws of USEC Inc., dated May 25, 2010, incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed on May 25, 2010 (Commission file number 1-14287).
- 4.1 First Amendment dated May 25, 2010, to Rights Agreement dated April 24, 2001, between USEC Inc. and Mellon Investor Services LLC, as Rights Agent, incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on May 25, 2010 (Commission file number 1-14287).
- 10.1 Securities Purchase Agreement, dated as of May 25, 2010, by and among USEC Inc., Toshiba Corporation, and Babcock & Wilcox Investment Company, incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on May 25, 2010 (Commission file number 1-14287).
- 10.2 Summary Sheet for 2010 Non-Employee Director Compensation.*
- 10.3 Power Contract between Tennessee Valley Authority and United States Enrichment Corporation, dated July 11, 2000 (Includes information previously omitted and filed separately pursuant to confidential treatment under Rule 24b-2).*
- 10.4 First Amendment, dated June 28, 2010, to the USEC Inc. Executive Deferred Compensation Plan, dated November 1, 2007.*
- 31.1 Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a).*
- 31.2 Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a).*
- 32 Certification of CEO and CFO pursuant to 18 U.S.C. Section 1350.*
- 101.INS XBRL Instance Document**
- 101.SCH XBRL Taxonomy Extension Schema Document**
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document**
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document**
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document**

* Previously filed with USEC Inc.’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2010.

** Filed herewith.

SIGNATURE

Pursuant to the requirements 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.

USEC Inc.

August 5, 2010

By:

/s/ John C. Barpoulis

John C. Barpoulis

Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

