

POLICY ISSUE
(Notation Vote)

August 12, 2015

SECY-15-0100

FOR: The Commissioners
FROM: Mark A. Satorius
Executive Director for Operations

SUBJECT: FINAL REPORT TO CONGRESS ON THE HEALTH, SAFETY, AND ENVIRONMENTAL CONDITIONS AT THE GASEOUS DIFFUSION PLANTS LOCATED NEAR PADUCAH, KENTUCKY, AND PORTSMOUTH, OHIO

PURPOSE:

This paper seeks Commission approval of the enclosed draft “Final Report to Congress on the Health, Safety, and Environmental Conditions at the Gaseous Diffusion Plants Located Near Paducah, Kentucky, and Portsmouth, Ohio,” for the reporting period from October 1, 2013, to February 2, 2015. This paper does not address any new commitments or resources implications.

BACKGROUND:

The Energy Policy Act of 1992 amended the Atomic Energy Act of 1954 (AEA) by adding a new Title II (Sections 1201 through 1805) establishing the United States Enrichment Corporation (USEC) and authorizing USEC to operate the gaseous diffusion uranium enrichment plants (GDPs) located near Paducah, Kentucky, and Portsmouth, Ohio. Both GDPs are owned and were previously operated by the U.S. Department of Energy (DOE). As amended in 1992, the AEA required that the U.S. Nuclear Regulatory Commission (NRC) establish safety, safeguards, and security regulations for the GDPs and certify that the GDPs comply with those regulations. The NRC established such regulations in 1994, and they are set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 76.

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In 1993, USEC and the DOE entered into a lease agreement ("*Lease Agreement Between the United States Department of Energy and the United States Enrichment Corporation*"). This lease is referenced in 10 CFR 76.35 (m)-(n), and is relevant to how depleted uranium at the GDPs is managed, and to financial issues regarding the disposal of depleted uranium generated by GDP operations.

Pursuant to 10 CFR Part 76, the NRC initially certified the GDPs in March 1997. Regulatory oversight of USEC operations within the leased areas of the GDPs was transferred from the DOE to the NRC on March 3, 1997. Section 1701 of the AEA (before being further amended by the Federal Reports Elimination Act of 1998) required that the NRC, in consultation with the DOE and the U.S. Environmental Protection Agency (EPA), report at least annually to Congress on the status of health, safety, and environmental conditions at the GDPs. The NRC report to Congress must include a determination of whether the GDPs comply with applicable regulations and laws. The first such report covered the period from March 3, 1997, through September 30, 1997, and was provided to the Commission in SECY-97-270 dated November 20, 1997. The first report was sent to the Congressional Oversight Committees on January 5, 1998.

The President signed into law the Federal Reports Elimination Act of 1998, Public Law 105-362, on November 10, 1998, modifying Section 1701b of the AEA to require that, instead of an annual NRC report to Congress, the report be issued "not later than the date on which a certificate of compliance is issued" under Section 1701c. Section 1701c was modified to allow a certificate of compliance (CoC) to be issued at intervals of up to 5 years. The staff provided the second report to the Commission in SECY-98-275, dated November 24, 1998, in connection with the then-pending recertification of the GDPs. The NRC sent the second report to the Congressional Oversight Committees on January 15, 1999.

The NRC issued USEC renewed CoCs for both GDPs on January 29, 1999, with an expiration date of December 31, 2003. The staff provided the third NRC report to the Commission in SECY-03-0189, dated October 31, 2003 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML032901096), covering the period from October 1, 1998, to September 30, 2003. This report was sent to the Congressional Oversight Committees on December 23, 2003. The NRC issued USEC renewed CoCs for both GDPs on December 29, 2003, with an expiration date of December 31, 2008. The staff provided the fourth NRC report to the Commission in SECY-08-0176, dated November 10, 2008 (ADAMS Accession No. ML082740436), covering the period from October 1, 2003, to September 30, 2008. This report was sent to the Congressional Oversight Committees on December 17, 2008.

The NRC again issued renewed CoCs for both GDPs on December 22, 2008, with an expiration date of December 31, 2013. The Portsmouth GDP leased facilities were returned to the DOE on September 30, 2011, and the NRC terminated the CoC for the Portsmouth GDP on October 12, 2011. The staff provided the fifth NRC report to the Commission in SECY-13-0125, dated November 25, 2013 (ADAMS Accession No. ML13253A179), covering the period from October 1, 2008, to September 30, 2013. This report was sent to the Congressional Oversight Committees on January 13, 2014.

DISCUSSION:

Unless the Commission or Congress directs otherwise, the sixth report to Congress (Enclosure 1) will be the final NRC report regarding the GDPs. The proposed report covers the period from October 1, 2013, to February 2, 2015, when the NRC terminated the CoC for the Paducah GDP. The draft report primarily addresses NRC-regulated activities at the Paducah GDP, discusses compliance with NRC regulations, and provides a summary assessment of USEC's performance until the CoC was terminated. Sections A and B below include a brief summary of the staff's proposed final report to Congress.

In accordance with Section 1701 of the AEA, the staff consulted with the DOE and the EPA in preparing its proposed report, and provided the DOE and the EPA with preliminary copies of Enclosure 1 for their review and comment. Enclosure 1 incorporates the input provided by the DOE and the EPA.

A. Paducah GDP

By letter dated April 2, 2013 (ADAMS Accession No. ML13105A010), USEC submitted a timely and sufficient application for renewal of the CoC, for which the staff conducted an acceptance review. However, by letter dated June 3, 2013 (ML13176A151), USEC notified the NRC of its decision to permanently cease uranium enrichment activities at the Paducah GDP. The NRC staff therefore suspended its detailed review of USEC's renewal application, and placed the CoC on timely renewal pursuant to 10 CFR 76.55. The enrichment activities at the Paducah GDP permanently ceased on July 25, 2013, and by letter to the DOE dated August 1, 2013, USEC gave notice of its intent to terminate the lease of the Paducah GDP.

Following its decision to cease enrichment activities, USEC began a deactivation process and returned the Paducah GDP leased facilities to the DOE on October 21, 2014. The NRC monitored USEC's deactivation activities to ensure that USEC continued to meet all applicable NRC requirements. After the DOE's confirmation that USEC's return of the Paducah GDP facilities was in accordance with the terms of the 1993 lease, and the staff's determination that all NRC requirements had been met, the NRC terminated the Paducah GDP's CoC on February 2, 2015 (ML14318A331).

As detailed in Enclosure 1, the NRC staff conducted frequent inspections at the Paducah GDP site during the reporting period to verify USEC's compliance with the NRC's requirements for control of special nuclear material, source and byproduct material, low enriched and depleted uranium, and radioactive and mixed wastes, to ensure appropriate control over this material would be maintained until regulatory responsibility for the site was transferred to the DOE. Based on these inspections, the staff found that USEC conducted NRC-regulated activities in a manner that adequately protected public health and safety, security, and the environment at the Paducah GDP site, and no violations of NRC regulations were identified during the reporting period. As indicated above, during most of this time USEC was engaged in its Paducah GDP deactivation process and was not enriching uranium at the site. Offsite radiological doses, as well as doses to workers, had been very low and well within NRC regulatory limits. During the reporting period there were no events at the Paducah GDP site resulting in a significant release of radioactive material to the environment. In addition, to ensure continued protection of classified matter and information during the reporting period, the NRC staff conducted

inspections of USEC's classified matter program to verify USEC's compliance with 10 CFR Part 95 requirements.

B. Portsmouth GDP

The NRC terminated USEC's CoC for the Portsmouth GDP on October 12, 2011. Thus, Enclosure 1 primarily focuses on the Paducah GDP. Portions of the draft report to Congress reference the Lead Cascade Facility that is located on the Portsmouth GDP site, and the partially-constructed American Centrifuge Plant that is co-located with the Lead Cascade Facility. The Lead Cascade Facility is not discussed in detail because the focus of this report is the health, safety, and environmental conditions of the GDPs.

RECOMMENDATION:

The enclosed report to Congress meets the requirements of the AEA and appropriately characterizes the health, safety, and environmental conditions at the Paducah GDP site. The staff recommends that the Commission approve the report and provide it to Congress.

COORDINATION:

The Office of the General Counsel has reviewed this package and has no legal objection.

/RA Michael F. Weber Acting for/

Mark A. Satorius
Executive Director
for Operations

Enclosures:

1. Report to Congress

inspections of USEC's classified matter program to verify USEC's compliance with 10 CFR Part 95 requirements.

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Enclosures:

1. Report to Congress
2. Transmittal Letter to Congressional Oversight Committees

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