USEC
A Global Energy Company

November 24, 2008
GDP 08-2040

Mr. Michael F. Weber
Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Portsmouth Gaseous Diffusion Plant (PORTS)
Docket No. 70-7002; Certificate No. GDP-2
Submittal of NRC Form 327, "Special Nuclear Material (SNM) and Source Material (SM) Physical Inventory Summary Report"

INFORMATION TRANSMITTED HEREWITH IS PROTECTED FROM PUBLIC DISCLOSURE AS CONFIDENTIAL COMMERCIAL OR FINANCIAL INFORMATION AND/OR TRADE SECRETS PURSUANT TO 10 CFR 2.390(d)(1)

Dear Mr. Weber:

As required by 10 CFR 74.17(a) and the Fundamental Nuclear Material Control Plan (FNMCP), the United States Enrichment Corporation (USEC) is submitting to the United States Nuclear Regulatory Commission (NRC), the SNM and SM Physical Inventory Summary Report for the Portsmouth, Ohio, Gaseous Diffusion Plant. These Form 327 documents in Enclosures 1 through 6 cover the inventory period ending September 30, 2008. The inventory was taken at 1400 hours on September 30, 2008 for the cascade inventory. The rest of the data represents inventories as of September 30, 2008, and cover the annual period from September 29, 2007 through September 30, 2008.

- Enclosures 1 through 6 include inventory data for the Portsmouth plant.
- Enclosure 7 provides additional notes regarding the inventory data.

Enclosures 1 through 7 contain information concerning USEC's material control and accounting program for special nuclear material at the plant. As such, Enclosures 1 through 7 contain confidential commercial or financial information that is exempt from public disclosure pursuant to Section 1314 of the Atomic Energy Act of 1954, as amended, and 10 CFR 2.390(a)(4), 2.390(d)(1) and 9.17(a)(4). USEC hereby requests that Enclosures 1 through 7 be withheld from public disclosure based on 10 CFR 2.390(d), which states, in part:

United States Enrichment Corporation
Portsmouth Gaseous Diffusion Plant, P.O. Box 628, Piketon, OH 45661
Telephone 740-897-2331 Fax 740-897-2909 http://www.usec.com

NMSS01

The following information shall be deemed to be commercial or financial information within the meaning of 9.17(a)(4) of this chapter and shall be subject to disclosure only in accordance with the provisions of 9.19 of this chapter.

(1) Correspondence and reports to or from the NRC which contain information or records concerning a licensee's or applicant's physical protection or material control and accounting program for special nuclear material not otherwise designated as Safeguards Information or classified as National Security Information or Restricted Data.

There are no new commitments contained in this submittal. Should you have any questions or comments on the enclosed information, please contact John Oyer at (740) 897-2182.

Sincerely,

A. Stone/for

Doug K. Fogel
Manager, Nuclear Regulatory Affairs

Enclosures: As Stated

cc: J. Henson, Chief, Fuel Facility Inspection, NRC Region II
T. Pham, Office of Nuclear Security and Incident Response
M. Miller, NRC Resident Inspector, PGDP
M. Raddatz, NRC Project Manager