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May 25, 2004 GDP 04-0035

Robert C. Pierson Director, Division of Fuel Cycle Safety and Safeguards Office of Nuclear Material Safety and Safeguards ATTN: Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Paducah Gaseous Diffusion Plant (PGDP) Portsmouth Gaseous Diffusion Plant (PORTS) Docket Nos. 70-7001/70-7002, Certificate Nos. GDP-1 and GDP-2 Conference Call Results - NRC Response to USEC's NRC Bulletin 2003-03 Submittal

Dear Mr. Pierson:

In a conference call on April 21, 2004, the United States Enrichment Corporation (USEC) contacted Mr. Lance Lessler of your staff to confirm USEC's understanding of the NRC's March 17, 2004 letter approving, in part, USEC's response to NRC Bulletin 2003-03 regarding 1-inch Hunt cylinder valves. This letter documents the understandings reached in that call with respect to the NRC's letter and USEC's actions based on that understanding:

- Prior to installing a new Hunt valve from USEC's warehouse supply on a depleted UF₆ cylinder, a valve seat leakage test will be performed. Any leakage will cause the valve to be rejected for installation.
- USEC indicated in the call that the Depleted Uranium Hexafluoride Project of Uranium Disposition Services (UDS) is a DOE regulated activity. The safety implications of Hunt valves on depleted UF₆ cylinders will likely be addressed when the contracts for conversion of depleted UF₆ are negotiated among DOE, UDS, and USEC.
- No further shipments to Russia of empty or nitrogen filled cylinders with Hunt valves installed are being made. These shipments were completed within the required 30 days.
- USEC is using the term "empty" as that term is used in ANSI N14.1, Section 8.1.2 "Empty Cylinders," i.e. containing residual quantities (heels) of UF₆ not exceeding the amount stipulated in the table in Section 8.1.2 of the standard (e.g. not exceeding 25 lbs for a 30B cylinder and 50 lbs for a 48" diameter cylinder).
- Consistent with ANSI N14.1, cylinders with Hunt valves already installed that have exceeded their 5-year hydrostatic test date can be heated and emptied prior to replacing the Hunt valve. These cylinders will not have the Hunt valves replaced unless empty. Once empty, no cylinder will be refilled until the Hunt valve is replaced and it is recertified per the requirements of ANSI N14.1, Section 6.3.2.

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- The NRC response approved storage of tails cylinders with Hunt valves indefinitely and continued processing of natural and enriched cylinders subject to stipulations. As required by our Fundamental Nuclear Materials Control Plan, selected tails cylinders are sampled quarterly. Also, on occasion, there may be an economic advantage to refeeding certain tails material. Cylinders containing depleted UF₆ can be subject to further processing as long as the stipulations for cylinders containing normal and enriched UF₆ are followed. That is, once a tails cylinder containing a Hunt valve is emptied it is not refilled until the Hunt valve is replaced with a valve manufactured by a supplier on the USEC Approved Suppliers List.
- For each 30B cylinder supplied to the Russians for filling, a 1S type sample cylinder is also provided for filling with a sample of the material in its companion 30B. Should some problem occur with this sample cylinder, or some problem occur during sample analysis that would require more material than is provided in the 1S, USEC could sample the 30B without first replacing the Hunt valve. Although this has never happened, USEC must be prepared should this need arise in the future.
- In order that USEC may fulfill its intent to honor our customers' commitments to NRC in their responses to the Hunt valve bulletin, USEC requested copies of the NRC's responses to our conversion supplier and fabricator customers. Mr. Lessler indicated the NRC's responses were still under review and that we would be on distribution for this correspondence.

Conference Call Participants:

Lance Lessler, NRC

Steve Toelle, Director, Nuclear Regulatory Affairs, USEC-HQ Steve Cowne, Manager, Nuclear Regulatory Affairs, PGDP David Stadler, Senior Regulatory Engineer, PGDP Barry Tilden, Balance of Plant Systems Engineering Manager, PGDP Dale Rogers, Russian Program Manager, PGDP Al Stone, Senior Regulatory Engineer, PORTS Robert C. Pierson May 25, 2004 GDP 04-0035, Page 3

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If you have any questions, please contact me at (301) 564-3250. There are no new commitments contained in this submittal.

Sincerely,

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Steven A. Toelle Director, Nuclear Regulatory Affairs

cc: B. Bartlett, NRC Resident Inspector, PGDP J. Henson, NRC Region II L. Lessler, NRC HQ D. Martin, NRC HQ