

May 4, 2011

Mr. Steven A. Toelle, Director
Regulatory Affairs
United States Enrichment Corporation
2 Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817-1818

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING PADUCAH
GASEOUS DIFFUSION PLANT'S CERTIFICATE AMENDMENT REQUEST TO
REVISE TECHNICAL SAFETY REQUIREMENTS 2.1.1, 2.1.4.13, AND 2.1.4.14,
AND TABLE 3.2.2-1, C-360 MINIMUM STAFFING REQUIREMENTS (TAC
NO. L32768)

Dear Mr. Toelle:

We completed our review of your Certificate Amendment Request transmitted by letter dated December 15, 2010 (Agencywide Documents Access and Management System [ADAMS], Accession Number ML103560602). Our review of your application has identified that additional information is needed before final action can be taken on your submittal.

We previously transmitted draft requests for additional information via e-mail (ADAMS Accession Number ML110960603) on April 5, 2011, and then conducted a teleconference with members of your staff (ADAMS Accession Number ML111190189) on April 26, 2011, to clarify the intent of the U.S. Nuclear Regulatory Commission (NRC) staff's questions.

Subsequent to the teleconference, additional information is still necessary to complete our review. The additional information, specified in the enclosure, should be provided within 30 days from the date of this letter.

Pending additional information, which answers this request, we anticipate completing our review by the end of June 2011. This date could change depending on the findings of our technical review, urgent assignments, or other factors. We will promptly communicate any significant changes to this schedule.

In accordance with Title 10 of the *Code of Federal Regulations* 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

S. Toelle

- 2 -

If you have any questions regarding this matter, please contact me at 301-492-3221 or via e-mail to Kevin.Mattern@nrc.gov. Please reference the above TAC in future correspondence related to this request.

Sincerely,

/RA/

Kevin S. Mattern, Project Manager
Conversion, Deconversion
and Enrichment Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No. 70-7001
Certificate No. GDP-1

cc: Mr. Vernon Shanks, USEC-Paducah
Paducah Gaseous Diffusion Plant
PO Box 1410
Paducah, KY 42001

Mr. Randall M. DeVault
U.S. Department of Energy – Oak Ridge
PO Box 2001
Oak Ridge, TN 37832

S. Toelle

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PO Box 1410
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U.S. Department of Energy – Oak Ridge
PO Box 2001
Oak Ridge, TN 37832

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NAME	KMattern	LAllen	TLiu	DMorey
DATE	5/2/2011	5/3/2011	5/3/2011	5/4/2011

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**REQUEST FOR ADDITIONAL INFORMATION
USEC, PADUCAH GASEOUS DIFFUSION PLANT
CERTIFICATE AMENDMENT REQUEST**

Please provide the following information:

- 1) In the “Justification of Changes” section of Enclosure 2 of the submittal, it is stated that, “[T]he accident analysis does not credit any operator actions during these accident scenarios other than to evacuate the area and notify the PSS.” The Safety Analysis Report (SAR), page 4.3-101, also states that: “[N]o actions are required in the C-360 facility because automatic detection of the lines are provided.” Contrary to the above, SAR pages 4.3-96, 4.3-101, 4.3-102, and 4.3-103 describe required mitigative operator action, operator training, and manual isolation. Provide clarification that all references to “operator action” in Accident 4.3.2.2.10 in the Paducah Gaseous Diffusion Plant’s SAR do not refer to any accidents in the C-360 facility. If “operator action” is in fact required for any accident in the C-360 facility, provide additional justification for reducing staffing requirements and associated additional mitigative measures.
- 2) Based on page 4.3-95 of the SAR which states that, “[D]uring these operating modes, multiple operator errors or equipment malfunctions could occur that could result in a pigtail failure and a release of UF₆,” it is unclear that potential initiators for the relevant accidents are not adversely affected—even though the initial conditions may not be affected. While the staffing changes may not affect the accident analysis or response, provide further justification to demonstrate that the reduction in staff does not decrease operational effectiveness and potentially increase accident frequency, specifically in modes 2A, 6A and 6B.
- 3) The current submittal states: “[C]ompliance with the TSR is expected regardless of how many operators are present in C-360.” Provide additional justification other than, “since no operations are performed during this mode,” as to why a change from 2 operators required to 0 operators required for mode 2B would continue to maintain the same level of effectiveness of the Plant’s safety programs and ensures compliance with the Technical Safety Requirements (TSR).
- 4) Provide additional justification for amending the TSRs to decrease the minimum staffing requirements from 43 to 40 for the C-360 facility immediately following the previously approved increase in the maximum number of hours for an individual worker from 24 to 26 in a 48-hour period. Discuss the synergistic effects of these two licensing actions, specifically, whether or not an increase in the probability of occurrence of evaluated accidents and/or a decrease in the margin of safety would result from these related changes. Provide justification that these related changes would ensure that adequate shift coverage will be maintained without routine heavy use of overtime as per SAR, Section 3.2.2.

Enclosure