



January 4, 2006
GDP 05-0048

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

**Paducah Gaseous Diffusion Plant (PGDP)
Docket No. 70-7001, Certificate No. GDP-1
Certificate Amendment Request - Revise TSR 3.2.2.1 Minimum Staffing Requirements**

Dear Mr. Strosnider:

In accordance with 10 CFR 76.45, the United States Enrichment Corporation (USEC) hereby submits a request for amendment to the certificate of compliance for the Paducah, Kentucky, Gaseous Diffusion Plant (PGDP). This Certificate Amendment Request (CAR) proposes to modify the TSR Table 3.2.2.1 minimum staffing requirements associated with the Health Physics function.

Enclosure 1 contains the Oath and Affirmation. Enclosure 2 to this letter provides a detailed description and justification for the proposed change. Enclosure 3 is a copy of the revised TSR page associated with this request for NRC approval. Enclosure 4 contains the basis for USEC's determination that the proposed change associated with the Certificate Amendment Request is not significant.

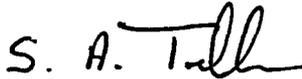
USEC is requesting this change to allow more flexibility when assigning and scheduling personnel for the Health Physics minimum staffing requirement. USEC requests NRC review of this CAR as soon as practical. The amendment should become effective upon issuance.

NMSS01

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Any questions related to this submittal should be directed to Mr. Mark Smith at (301) 564-3244.
There are no new commitments contained in this submittal.

Sincerely,



Steven A. Toelle
Director, Nuclear Regulatory Affairs

- Enclosures:
1. Oath and Affirmation
 2. United States Enrichment Corporation (USEC), Certificate Amendment Request, Revise TSR 3.2.2.1 Minimum Staffing Requirements, Detailed Description and Justification of the Change
 3. Certificate Amendment Request, Paducah Gaseous Diffusion Plant, Letter GDP 05-0048, Removal/Insertion Instructions
 4. United States Enrichment Corporation (USEC), Certificate Amendment Request, Revise TSR 3.2.2.1 Minimum Staffing Requirements, Significance Determination

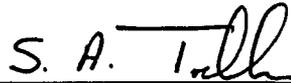
cc: M. Thomas, NRC Sr. Resident Inspector, PGDP
J. Hensen, NRC Region II Office
D. Martin, NRC Project Manager, PGDP

Enclosure 1
GDP 05-0048

Oath and Affirmation

OATH AND AFFIRMATION

I, Steven A. Toelle, swear and affirm that I am the Director, Nuclear Regulatory Affairs of the United States Enrichment Corporation (USEC), that I am authorized by USEC to sign and file with the Nuclear Regulatory Commission this Certificate Amendment Request for the Paducah Gaseous Diffusion Plant addressing revisions to the Technical Safety Requirements described in USEC letter GDP 05-0048, that I am familiar with the contents thereof, and that the statements made and matters set forth therein are true and correct to the best of my knowledge, information, and belief.



Steven A. Toelle

On this 4th day of January, 2006, the individual signing above personally appeared before me, is known by me to be the person whose name is subscribed to within the instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof I hereunto set my hand and official seal.

Rita Peak-Campbell, Notary Public
State of Maryland, Montgomery County
My commission expires December 1, 2009



**Enclosure 2
GDP 05-0048**

**USEC-01
Certificate Amendment Request
Revise TSR 3.2.2.1 Minimum Staffing Requirements**

**United States Enrichment Corporation (USEC)
Certificate Amendment Request
Revise TSR 3.2.2.1 Minimum Staffing Requirements
Detailed Description and Justification of the Change**

Description of Change

This proposed change will revise TSR Table 3.2.2.1 to revise the minimum staffing requirements for Health Physics from two to one.

The change to TSR Table 3.2.2.1 is shown below as underlined:

Table 3.2.2.1 Minimum Staffing Requirements^a

Facility Function	Mode/Operation	Staffing Requirements	Work Area Definition
Health Physics	At all times	<u>1</u>	Onsite.

Reason for the Change

USEC is requesting to reduce the Health Physics minimum staffing from two to one because there is no safety function performed by Health Physics which requires two on-site personnel at all times. The proposed change will allow USEC to utilize resources more effectively by eliminating the requirement to call in additional Health Physics personnel if only one is needed to support on-going activities. The current Health Physics minimum staffing requirements cause USEC to incur additional call in expenses without a commensurate safety benefit.

Justification for the Change

During normal operations, Health Physics personnel monitor radiation and contamination levels in the work environment and recommend necessary corrective measures to minimize these levels. During normal working hours, there are approximately 10 to 20 Health Physics personnel available to perform this function. On nights, weekends, and holidays two Health Physics personnel are assigned to perform this function in accordance with TSR minimum staffing requirements. During normal operations, the primary function of Health Physics personnel is to support on-going work activities. If an unexpected absence results in Health Physics personnel becoming unavailable during normal operations, radiological safety can be maintained by temporarily stopping work that requires Health Physics coverage. The Health Physics minimum

staffing duties during normal operations are on-going work support activities and are not associated with any immediate radiological safety needs.

During emergency operations, Health Physics personnel filling minimum staffing positions are available to monitor and control radiological contamination and exposure; however, there is no safety basis for requiring two Health Physics personnel. Emergency procedures do not credit Health Physics personnel as the only source of radiological monitoring and control. Emergency procedures currently provide for the use of other plant emergency squad (E-Squad) personnel to monitor contamination and radiological exposure, and the equipment needed to perform this function is staged on emergency response vehicles. If the emergency results in the activation of the emergency response organization, additional Health Physics personnel are on call to support emergencies and are required to report to the plant site within one hour. Even if no Health Physics personnel were immediately available, the E-Squad has personnel who have been trained to monitor and control radiological contamination and exposure until Health Physics personnel can be called in. Revising the minimum staffing requirement to one Health Physics person will not have a significant impact on normal or emergency operational radiological safety.

USEC's review of the PGDP certificate application did not identify a basis for a minimum staffing requirement of two for the Health Physics function. The accident analysis does not credit the Health Physics minimum staffing function for the prevention or mitigation of accidents. As discussed above, a Health Physics function minimum staffing requirement of one is adequate to provide radiological safety during normal and emergency operations.

Enclosure 3
GDP 05-0048
2 Pages Total

Certificate Amendment Request Paducah Gaseous Diffusion Plant Letter GDP 05-0048 Removal/Insertion Instructions	
Remove Pages	Insert Pages
APPLICATION FOR UNITED STATES NUCLEAR REGULATORY COMMISSION CERTIFICATION VOLUME 4	
TSR Section 3.0 Page 3.0-4	TSR Section 3.0 Page 3.0-4

SECTION 3.0 ADMINISTRATIVE CONTROLS

Table 3.2.2.1 Minimum Staffing Requirements^a

Facility Function	Mode/Operation	Staffing Requirements	Work Area Definition
C-300	All	4	PSS on the plant site with designee in C-300. APSS on plant site. Cascade Coordinator on plant site. Power Operator in C-300.
C-360	1b, 3, 4, 5	1 ^b	In the facility or immediately surrounding grounds to include the guard station and the local cylinder yard.
	1a, 2, 6	2	In the facility or immediately surrounding grounds to include the guard station and the local cylinder yard.
	7	2	At least one person in the Laboratory. One person in the facility or immediately surrounding grounds to include the guard station and the local cylinder yard.
C-333-A	1, 2, 5	2	Two persons in the operating facility or immediately surrounding grounds including the local cylinder yard.
C-337-A	3, 4	1	One person in the facility or immediately surrounding grounds including the local cylinder yard.
C-310	Product withdrawal 1, 2, 3, 4 Cascade 1, 3	2 ^c	At least one person in the ACR. One person in the facility or immediately surrounding grounds including the local cylinder yard.
C-315	1, 2, 3, 4	2 ^c	Two persons in the facility or immediately surrounding grounds including the local cylinder yard.
C-331	Cascade 1, 2, 3	2	At least one person in the ACR.
C-335	F/S 1, 2, 3, 4, 5		
C-333	Cascade 1, 2, 3	3	At least one person in the ACR.
C-337	F/S 1, 2, 3, 4, 5		
Health Physics	At all times	1	Onsite.
Power Operations	At all times	4	Onsite.
Utilities Operations	At all times	4	Onsite.
Fire Services	At all times	4 ^d	Onsite ^d .
Security Services	At all times	4	Onsite.

a. Staffing may be less than the minimum requirement listed for a period of a time not to exceed four hours in order to accommodate unexpected absence of on-duty shift members provided immediate action is taken to restore the shift manning requirements to within the minimum requirements. The C-331, C-333, C-335, and C-337 ACRs shall always be manned. The ACRs for C-310, C-315, C-333-A, and C-337-A shall be manned when required by operating mode. Manning not required during emergency conditions requiring building/area evacuation.

b. Manning requirement is zero if all autoclaves are in MODE 6 (Not In Use for C-333-A and C-337-A) or MODE 8 (Not In Use for C-360) and the Transfer Station is in MODE 8 (Not in Use).

c. When withdrawal process equipment is brought below atmospheric pressure or to a UF₆ negative in the NOT IN USE (Mode 4) operating mode then the staffing requirements for the appropriate withdrawal facility do not apply.

d. In accordance with footnote "a", Fire Services personnel making an unexpected run to deliver an individual to a local hospital are allowed to be offsite and are considered to be on duty and available.

**United States Enrichment Corporation (USEC)
Certificate Amendment Request
Revise TSR 3.2.2.1 Minimum Staffing Requirements
Significance Determination**

The United States Enrichment Corporation (USEC) has reviewed the proposed changes associated with this certificate amendment request and provides the following Significance Determination for consideration.

1. No Significant Change to Any Conditions to the Certificate of Compliance

None of the Conditions to the Certificate of Compliance specifically address the subject TSR. Thus, the proposed change will have no impact on any of the Conditions to the Certificate of Compliance.

2. No Significant Change to Any Condition of the Approved Compliance Plan

All Compliance Plan Issues have been closed. As a result, the conditions specified in the compliance plan are no longer in effect. Thus, this proposed change does not represent a significant change to any condition of the approved Compliance Plan.

3. No Significant Increase in the Probability of Occurrence or Consequences of Previously Evaluated Accidents

The accidents previously evaluated in the SAR do not credit the Health Physics minimum staffing position for the prevention or mitigation of accidents. The proposed change is administrative only and does not involve a physical change to the plant. The proposed change does not change the operation of any equipment important to safety or change the quantities and types of materials used. The proposed change does not affect any accident prevention or mitigation mechanisms. Therefore, this change will not result in a significant increase in the probability of occurrence or consequences of previously evaluated accidents.

4. No New or Different Type of Accident

No new or different activities are being proposed by this change. The proposed change does not create any new failure modes or create initiating events that are different than previously evaluated in the SAR. Therefore, this proposed change will not create a new or different type of accident.

5. No Significant Reduction in Margins of Safety

The proposed change to the TSR is administrative only and will not result in any changes to the plant or plant operations, or to the safety basis for any TSR. There is no defined margin of safety for this administrative TSR. Therefore, there is no significant reduction in margins of safety associated with the proposed change.

**United States Enrichment Corporation (USEC)
Certificate Amendment Request
Revise TSR 3.2.2.1 Minimum Staffing Requirements
Significance Determination**

6. No Significant Decrease in the Effectiveness of Any Programs or Plans Contained in the Certificate Application

The proposed change to the TSR will not result in a change to any of the programs or plans contained in the Certificate Application. The only effect of this proposed change is to reduce the number of Health Physics personnel who are required to be on-site at all times. Therefore, the proposed change will not result in a decrease in the effectiveness of any programs or plans contained in the Certificate Application.

7. The Proposed Changes do not Result in Undue Risk to 1) Public Health and Safety, 2) Common Defense and Security, and 3) the Environment

Due to the fact that there is no significant increase in the probability or consequences of any accident previously analyzed and no new or different type of accident, there will be no undue risk to the public health and safety because of the proposed change. In addition, the proposed change will have no impact on plant effluents or on the programs and plans in place to implement physical security, protection of classified matter, transportation security, or special nuclear material accountability. Consequently the proposed change to the TSR will not pose any undue risk to the public health and safety, common defense and security, or the environment.

8. No Change in the Types or Significant Increase in the Amounts of Any Effluents that May be Released Offsite

The proposed change does not involve any physical change to the plant, or plant operations that could change the types or increase the amounts of any effluents that may be released offsite. Therefore, the proposed change does not change the type or significantly increase the amount of effluents that may be released offsite.

9. No Significant Increase in Individual or Cumulative Occupational Radiation Exposure

The proposed change does not significantly increase the probability or consequences of a UF₆ release or criticality event. The proposed changes will not effect the radiological protection program description or the actions in place to minimize occupational exposures. Therefore, there is no increase in individual or cumulative occupational radiation exposure as a result of this change.

**United States Enrichment Corporation (USEC)
Certificate Amendment Request
Revise TSR 3.2.2.1 Minimum Staffing Requirements
Significance Determination**

10. No Significant Construction Impact

The proposed changes will not involve physical plant modifications. Therefore, there are no significant construction impacts associated with this change.