



February 27, 2009
GDP 09-0006

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

**Portsmouth Gaseous Diffusion Plant (PORTS)
Docket No. 70-7002, Certificate No. GDP-2
Certificate Amendment Request - Revision of Technical Safety Requirement (TSR)
3.21, Sharing of Facilities, Structures, Systems, and Components**

Dear Mr. Weber:

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 Portsmouth Gaseous Diffusion Plant (PORTS). This Certificate Amendment Request (CAR) proposes to revise TSR 3.21, Sharing of Facilities, Structures, Systems, and Components.

This change is being made as the result of the planned sublease of the X-5000 Switch Yard and its associated support facilities from the Gaseous Diffusion Plant (GDP) control to the American Centrifuge Plant (ACP) control. The X-5000 Switch Yard provides electrical power to several GDP owned facilities and two Structure, System, Components (SSCs) relied upon in the GDP TSRs. The change involves adding an exception to TSR 3.21 stating that the USEC GDP will rely upon the ACP NRC License holder to provide electrical power to the XT-847 Criticality Accident Alarm System (CAAS) and the X-6644 High Pressure Fire Water System (HPFWS) electric pumps.

There are no new commitments contained in this submittal. Any questions related to this submittal should be directed to me at (301)564-3250.

Sincerely,

Steven A. Toelle
Director, Regulatory Affairs

NM 5501

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 2. United States Enrichment Corporation (USEC), Certificate
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 Detailed Description and Justification
 3. Certificate Amendment Request, Portsmouth Gaseous Diffusion
 Plant, Letter GDP 09-0006, Removal /Insertion Instructions
 4. United States Enrichment Corporation (USEC), Certificate
 Amendment Request, Revision of Technical Safety Requirement
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 Significance Determination

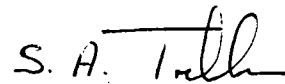
cc: D. Hartland, Sr. Fuel Facility Inspector, NRC Region II
 J. Henson, Chief, Fuel Facility Branch 2, NRC Region II
 M. Raddatz, NRC Project Manager, NRC HQ
 R. DeVault, Regulatory Oversight Manager, DOE

Enclosure 1
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Oath and Affirmation

OATH AND AFFIRMATION

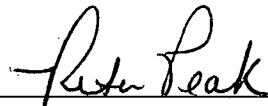
I, Steven A. Toelle, swear and affirm that I am the Director, Regulatory Affairs of the United States Enrichment Corporation (USEC), that I am authorized by USEC to sign and file with the Nuclear Regulatory Commission this Certificate Amendment request for the Portsmouth Gaseous Diffusion Plant addressing the revision to the Technical Safety Requirement 3.21, Sharing of Facilities, Structures, Systems, and Components, as described in USEC letter GDP 09-0006, 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 27th day of February 2009, 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 acknowledge that he executed the same for the purposes therein contained.

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



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

**United States Enrichment Corporation (USEC)
Certificate Amendment Request
Revision of Technical Safety Requirement 3.21
Sharing of Facilities, Structures, Systems, and Components
Detailed Description and Justification**

Description of Change

The following will be added to the end of TSR 3.21, which currently states "Facilities, structures, systems and components relied upon in Section 2 of the TSRs are controlled by USEC. The corporation is not dependent upon outside agencies to provide the level of safety described in this TSR."

Added Text:

"This is with the exception of electric power for the XT-847 CAAS and the X-6644 High Pressure Fire Water Pumps; the electric power for these SSCs is controlled by the ACP NRC License holder."

Background Information:

The PORTS GDP enrichment operations were ceased by USEC in 2001. In 2004, USEC leased large portions of the former DOE Gas Centrifuge Enrichment Plant (GCEP) from DOE to begin preparations for its Centrifuge Lead Cascade operation. Beginning in around 2007, USEC began to lease/sublease additional portions of the GCEP area for modification and equipment installation in support of the commercial ACP deployment activities. During this time and up to the present, USEC has provided utilities for GDP Certificate operations, ACP, and all other site tenants.

In support of the ACP deployment activities, the sublease and turnover of the X-5000 Switch Yard and its associated support and power distribution facilities from the GDP to the ACP NRC License holder needs to occur. The following facilities/systems are to be subleased to ACP:

X-5000	GCEP Switch House
X-5001	Substation
X-5001A	Valve House
X-5001B	Oil Pumping Station
X-5015	HV Electrical System (including Underground 345 kV lines from line disconnect to X-5000 Switch Yard including easement)
X-2215A	Electrical Distribution to Process Buildings
X-2215B	Electrical Distribution to Areas Other Than Process Buildings
X-2215C	Exterior Light Fixtures
X-530G	Oil Pumping Station

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This will mean that a number of USEC facilities, including two TSR SSCs (XT-847 CAAS and X-6644 HPFWs electrical pumps) will have their electrical power source controlled by ACP rather than the GDP. The affected facilities are as follows:

XT-847	Waste Management Staging Facility
X-6619	Sewage Treatment Facility
X-7721	Maintenance Stores Training Building
X-1020	Emergency Operation Center
X-1007	Fire Station
X-112	Data Processing Building
X-6644	Fire Water Pump House

At the time of the sublease the GDP will continue providing for the operation and routine maintenance of the switchyard and its associated facilities. As ACP deployment continues to proceed, ACP plans to take over the operation and maintenance of the switch yard. Changes to the X-5000 power system, including its operation or maintenance will be controlled under the provisions of the ACP NRC License change control processes. In addition, the established Shared Site Process will provide the GDP with notification of significant planned changes and the GDP Plant Change Review process will be used to evaluate any future changes to operation that could impact GDP operations.

Justification of the Change:

This proposed change has no significant adverse effect on safety. The current SAR provides a description in Sections 2.1 and 2.2 of the Lease and associated regulatory environment for USEC GDP operations on the PORTS site. The proposed change does not directly affect any operations or activities performed under the NRC Certificate of Compliance other than the fact that ACP will control the power supply to a number of USEC facilities including two TSR SSCs (XT-847 CAAS and the X-6644 HPFWS electric pumps). The facilities/systems will be regulated in accordance with provisions outlined in the Lease Agreement. For some limited period of time after the sublease of the X-5000 and associated power supply systems is in effect, the GDP will continue to provide for the operation and routine maintenance for these power systems under an ACP issued Task Order (Currently through June 30, 2009). As such, there is no substantive change to the supply of power to the ACP or GDP facilities that will occur upon sublease of the facilities.

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The sublease of these power system facilities within the overall USEC corporate structure should not result in any substantive changes to the operation and maintenance of the X-5000 and its associated support facilities or the reliability and availability of power to either the ACP or GDP facilities in the GCEP area. Since the ACP requires reliable power to meet their own NRC License requirements the transference of the operation and maintenance of these systems to ACP should not adversely impact safety under the GDP Certificate. Although the GDP facilities that reside in the GCEP area as listed in the "Background Information" discussion require a reliable supply of power from the X-5000 Switch Yard, a potential loss of power to these facilities has been analyzed in the SAR for the safety significant SSCs and support systems with respect to meeting safety and security program requirements. The TSRs have established LCOs for dealing with the loss of SSCs due to power failure or other causes. The other facilities would experience operational issues on an extended loss of power but would not result in safety issues. Of course, there is a possibility of power loss to these facilities now; such potential problems are addressed in existing GDP procedures and practices and through the Incident Command system through the PSS office. In addition back-up diesel generators are installed for the X-1020 Emergency Operations Center, the X-1007 Fire Station and the X-6644 Fire Water Pump House contains a diesel driven fire water pump. The CAAS detectors in the XT-847 contain battery back-ups. The proposed change would not negate these established controls and analyses.

The design capacity for the power system for supplying the facilities in the former GCEP area remains the same; any ACP planned modifications to improve the capability of the X-5000 and associated power distribution system will be reviewed in accordance with change control processes of ACP and GDP (through the Shared Site process). Controls and protective devices continue to be present in the X-530 Switch Yard under GDP control to prevent problems in the X-5000 switchyard or power system from adversely impacting the X-530 power supply to the GDP Certified operations.

The overall scope of operations and activities conducted in the former GCEP areas supplied with power from the X-5000 is not substantially different from those already evaluated for GDP/ACP operations. Thus, the proposed change does not present any new or different potential for external impacts to the GDP Certified operations and activities as described in the SAR.

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The proposed change does impact TSR 3.21 dealing with Certificate program requirements and as such is being addressed in this CAR. Other than this change, the proposed change does not impact any of the TSRs dealing with plant operations. The Technical Safety Requirements for the PORTS facilities and their Basis Statements are unaffected by the proposed change.

The proposed change does not increase the probability or consequences of accidents analyzed nor do they introduce any new accidents. The proposed change has no adverse affect on plant safety or on any of the equipment important to safety or on any accident initiators or on accident mitigation. The proposed change does not present any new or different potential for accident initiation, prevention or mitigation with respect to the GDP certified operations and activities as described in the SAR.

Certificate Amendment Request Portsmouth Gaseous Diffusion Plant Letter GDP 09-0006 Removal/Insertion Instructions	
Remove Pages	Insert Pages
APPLICATION FOR UNITED STATES NUCLEAR REGULATORY COMMISSION CERTIFICATION TECHNICAL SAFETY REQUIREMENTS VOLUME 4	
TSR 3.21 Page 3.0-13	TSR 3.21 Page 3.0-13

SECTION 3.0 ADMINISTRATIVE CONTROLS

- Biological Monitoring
- Soil and Sediment Monitoring
- Methods of Evaluation and Demonstration of Compliance

3.17 PACKAGING AND TRANSPORTATION PROGRAM

A packaging and transportation quality assurance program shall be established, implemented, and maintained as described in the NRC-approved version of UEO-1041, "Radioactive Material Packaging and Transportation Quality Assurance Program."

3.18 CHEMICAL SAFETY PROGRAM

A Chemical Safety Program shall be established, implemented, and maintained as described in SAR Section 5.6.

3.19 OPERATIONS

An Operations Program shall be established, implemented, and maintained as described in SAR Section 6.5 and shall address the following program elements:

- Shift Operations
- Cascade Operations Organization and Administration
- Chemical/Utilities/Power Organization and Administration
- Operator Responsibility, Authority and Shift Routines
- Operations Procedures and Operator Aids and System Labeling
- Permits and Logging
- Management Monitoring of Operations
- Control of Equipment

3.20 ACCIDENT ANALYSIS

The Accident Analysis is presented in SAR Chapter 4. Changes to the Accident Analysis shall be reviewed and approved in accordance with the plant design change control process in Section 6.3 of the SAR.

3.21 SHARING OF FACILITIES, STRUCTURES, SYSTEMS, AND COMPONENTS

Facilities, structures, systems, and components relied upon in Section 2 of the TSRs are controlled by USEC. The corporation is not dependent upon outside agencies to provide the level of safety described in this TSR. This is with the exception of electric power for the XT-847 CAAS and the X-6644 High Pressure Fire Water Pumps; the electric power for these SSCs is controlled by the ACP NRC License Holder.

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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

There are no conditions to the Certificate of Compliance for operation of the Portsmouth Gaseous Diffusion Plant (GDP-2) that pertain to the specific TSR affected by this change. Thus, the proposed change has no significant impact on any 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 proposed change does not increase the probability of occurrence of previously evaluated accidents. The proposed change does not involve any change to the plant safety analysis or to the safety controls. The proposed change does not introduce any new external events from operations or activities in the ACP facilities that could initiate an accident in the GDP NRC Certified facilities or operations other than a loss of power. For a loss of power event, there were no accidents that could be initiated by loss of power that were identified in the GDP operations in the ACP facilities. The proposed change does not affect the probability of an uncontrolled release of radioactive material or of a criticality in facilities or operations governed by the NRC Certificate of Compliance. The SSCs relied upon to prevent occurrence of an accident previously evaluated in the SAR will continue to meet the current SAR envelope requirements for availability and reliability. The TSRs will continue to be met as required for plant operations. Thus, the proposed change does not affect the probability of occurrence of an accident previously described in the SAR since it does not introduce any new or different potential accident scenarios or accident initiating events. Therefore, the overall potential for an accident involving these operations is unchanged, and the probability of a previously evaluated SAR accident is not increased.

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4. No New or Different Type of Accident

The proposed change will not create any new failure modes or create initiating events that are different than previously evaluated. While the power supply for safety significant SSCs will now be controlled by ACP rather than the GDP, there are no new failure conditions identified for the SSCs and no different type of accident in NRC Certified facilities and operations has been identified. Accordingly, no new types of accidents are created by this change.

5. No Significant Reduction in Margins of Safety

The proposed change has no direct impact on the TSRs in Section 2. However, the proposed change does require a change to TSR 3.21 to describe that USEC GDP no longer fully controls some of the SSCs credited in Section 2 of the TSRs and since it would rely upon the ACP NRC License holder for power supply to the XT-847 CAAS and the X-6644 HPFWS electric pumps.

The requirements of the TSRs governing the operation of the plant will continue to be met at all times. No margins of safety are impacted as defined in the supporting bases documents for any TSR. The proposed change has no impact on the TSRs in Section 2. The requirements of the TSRs in Section 2 governing the operation of the plant will continue to be met at all times as required for the operating mode. No margins of safety are impacted as defined in the supporting bases documents for any TSR.

6. No Significant Decrease in the Effectiveness of the Plant's Safety and Safeguards Or Security Programs and Plans

The TSR change does not directly affect the plant's safety and safeguards or security programs and plans contained in the Certification Application. The change to the TSR as they relate to control of the power supply to the GDP facilities, structures, systems and components in the former GCEP area does not impact any programmatic controls, requirements or surveillances. The proposed change does involve potential indirect impacts to a number of programs; these will now be discussed.

The Fire Protection program is described in SAR Section 5.4. The proposed change does not require any change to the controls imposed by this program, nor does it involve any direct impact on this program. While the change in the control of the electrical power supply is an indirect change to the Program in that it changes the ability of the GDP to directly control the power supply system and outages thereto, the same HPFWS provides fixed fire suppression to the ACP

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facilities and is credited in their safety and regulatory basis as described in the NRC License. As such, the change in control of power should not adversely affect the overall reliability and availability of the HPFWS. Thus, the proposed change does not reduce the effectiveness of this program.

The proposed change does not directly impact the Emergency Plan (EP). There is no direct change to the scope, requirements, or controls of the EP. While the change in the control of the electrical power supply is an indirect change to the Program in that it changes the ability of the GDP to directly control the power supply system and outages thereto, the same facilities and equipment are used to provide the EP for the ACP facilities and is credited in their safety and regulatory basis as described in the NRC License. As such, the change in control of power should not adversely affect the overall reliability and availability of the EP facilities, structures, systems and components. Therefore, the proposed change does not reduce the effectiveness of the EP.

The proposed change does not directly impact the Physical Security Plan (PSP). There is no direct change to the scope, requirements, or controls of the PSP. While the change in the control of the electrical power supply is an indirect change to the Program in that it changes the ability of the GDP to directly control the power supply system and outages thereto, the same basic lighting and power requirements for the CAA fences and portals applies to the ACP facilities and is credited in their security plans as described in the NRC License. As such, the change in control of power should not adversely affect the overall reliability and availability of the power needed for operation of the SSCs credited in the GDP security plan, primarily lighting of the portals and CAA fence between the GDP and ACP CAAS. Therefore, the proposed change does not reduce the effectiveness of the PSP.

The initial change to ACP control will not result in a substantive change to the design, operation or maintenance of the X-5000 Switch Yard and associated facilities, structures, systems and components. As noted above, while there is the potential from future changes for indirect impacts to a number of GDP programs and plans, the handling of such changes by the change control requirements of the ACP License and the GDP Certificate will assure that such changes are properly communicated and evaluated. In general, the requirements for the potentially affected programs and plans are similar in both the GDP Certificate and the ACP License. Therefore, the effectiveness of these programs and plans is not decreased by this change.

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

This change does not alter any approved plant operation or physical condition nor any of the accident analysis assumptions. There is no increase in the probability of occurrence or consequences of a previously evaluated accident or malfunction of equipment important to safety. There are no new accident initiators, increase in hazardous materials or waste streams. The change being proposed has no adverse impact on security issues. Consequently, this change does not result in undue risk to public health and safety, the environment, or to the common defense and security.

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 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 UF_6 release. The proposed change 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.

10. No Significant Construction Impact

This change does not involve any construction activities. Therefore, there are no significant construction impacts associated with this change. Future ACP planned modifications will be evaluated both by ACP and the GDP in accordance with prescribed review requirements.