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Enrichment Corporation

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October 31, 1996

Dr. Carl J. Paperiello  
Director, Office of Nuclear Material  
Safety and Safeguards  
Attention: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

SERIAL: GDP 96-0190

**Portsmouth Gaseous Diffusion Plant (PORTS)**

**Docket No. 70-7002**

**Certificate Amendment Request-Changes to Compliance Plan Due Dates for NCS Related Issues**

Dear Dr. Paperiello:

In accordance with 10 CFR 76.45, the United States Enrichment Corporation (USEC or Corporation) hereby submits a request for amendment to the proposed certificate of compliance for the Portsmouth, Ohio Gaseous Diffusion Plant (GDP). This certificate amendment request revises the completion dates specified in the DOE/ORO-2027, Plan for Achieving Compliance with NRC Regulation at the Portsmouth Gaseous Diffusion Plant for various activities related to Issue 8, Nuclear Criticality Safety Approval Documents.

Issue 8 of the Plan For Achieving Compliance with NRC Regulations for the Portsmouth Gaseous Diffusion Plant, requires, in part, that formal NCSAs and NCSEs will be completed for all current operations involving uranium enriched to 1 weight percent or higher  $^{235}\text{U}$  and 15 grams or more  $^{235}\text{U}$  by November 30, 1996 and will be properly documented and approved in accordance with the NCS program requirements contained in the approved Certificate. It is anticipated that the majority of the activities (i.e. development of NCSAs/NCSEs) required by Issue 8 will be completed by November 30, 1996 as scheduled. However, there are several issues that require changes in operational philosophy or minor facility modifications based on drafted NCSAs/NCSEs which are necessary to ensure that NCS controls meet double contingency principles.

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Dr. Carl J. Paperiello  
October 31, 1996  
GDP 96-0190 Page 2

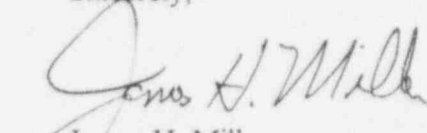
Examples of these changes include removal of piping, installation of isolation valves, and changes in maximum trap weights to support changes in assay. These changes are being handled as expeditiously as possible. Additional issues are likely to arise that will require the same effort as those referenced above as remaining NCSAs and NCSEs are completed and the NCSA/TSR Transition for the Cascade is implemented. Due to the above noted issues, this certificate amendment request revises the due date for completion of the NCSAs and NCSEs as described in Compliance Plan Issue 8 to January 31, 1997. This change in due date associated with Issue 8 has also required a change to dates associated with Compliance Plan Issues 9, 23, 24, 30 and 32 which were dependent upon completion of the NCSAs and NCSEs addressed in Issue 8.

Enclosure 1 to this letter provides a detailed description and justification for the proposed changes. Enclosure 2 provides a copy of the new pages for Compliance Plan Issues 8, 9, 23, 24, 30 and 32. Enclosure 3 contains the basis for USEC's determination that the proposed changes associated with this certificate amendment request are not significant.

Since this proposed certificate amendment request involves near term commitment dates only and not changes to programs or the facility, USEC requests NRC review and approval at your earliest convenience. The amendment should become effective immediately upon issuance.

Any questions related to this subject should be directed to Mr. Mark Smith at (301) 564-3244.

Sincerely,



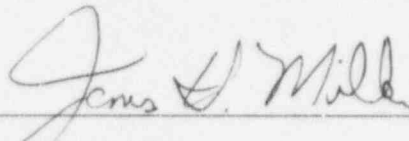
James H. Miller  
Vice President, Production

Enclosures: As Stated

cc: NRC Region III Office  
NRC Resident Inspector - PGDP  
NRC Resident Inspector - PORTS  
Mr. J. Dale Jackson (DOE)

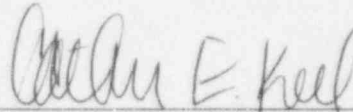
### OATH AND AFFIRMATION

I, James H. Miller, swear and affirm that I am Vice President, Production, 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, 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.



James H. Miller

Subscribed to before me on this 31 day of OCTOBER, 1996.



Notary Public

CATHERINE E. KEEL  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires February 4, 1997

**United States Enrichment Corporation(USEC)  
Proposed Certificate Amendment Request  
Plan for Achieving Compliance with NRC Regulations at the  
Portsmouth Gaseous Diffusion Plant  
[Compliance Plan] Issues 8, 9, 23, 24, 30, 32  
Detailed Description of Change**

This change extends the completion dates for the issuance of formal NCSAs and NCSEs for the current Portsmouth operations involving uranium enriched to 1 wt% or higher <sup>235</sup>U and 15 grams or more <sup>235</sup>U and the related implementation Compliance Plan Issues. The due date for completing the NCSAs and NCSEs as described in Compliance Plan Issue 8, Plan of Action is extended from November 30, 1996 to January 31, 1997. The implementation due dates of the related Compliance Plan Issues will be changed as follows:

Issue 9: In the Justification for Continued Operation(JCO) section, revise the completion date for verification of the NCS Requirements for the Upgraded NCSAs from December 31, 1996 to February 28, 1997. Also in the JCO, revise the completion date for developing procedural guidance for container handling and storage requirements from December 2, 1996 to February 28, 1997 [this latter change is also made in the Plan of Action].

In the Plan of Action, revise completion dates for identifying the remaining NCSA Requirements to be flowed-down into procedures from December 2, 1996 to January 31, 1997.

Issue 23: In the Plan of Action, item 1 (Program Management), revise the completion date for identifying all AQ-NCS items from December 31, 1996 to February 28, 1997. In item 2 (Design Requirements), revise the completion date for identifying AQ-NCS items and associated system guidance and design requirements from December 31, 1996 to February 28, 1997.

Issue 24: In the Plan of Action, revise the completion dates from December 31, 1996 to February 28, 1997 for: upgrading the work control process for AQ-NCS items; upgrading the preventive maintenance program for AQ-NCS items; revising the measuring and test equipment calibration program for AQ-NCS equipment; revising/developing the corrective maintenance, preventive maintenance, calibration and surveillance test

procedures for AQ-NCS items; and developing the training materials for the aforementioned programs for AQ-NCS items. Additionally, revise the completion date for identifying the procedure deficiencies for performing corrective maintenance, preventive maintenance, calibration and surveillance testing of AQ-NCS SSCs from October 31, 1996 to January 31, 1997.

- Issue 30: In the Plan of Action, item 2, revise the completion date for issuance of level 2, 3 and 4 AQ-NCS procedures (unless covered by Issue 8) from December 31, 1996 to February 28, 1997.
- Issue 32 In the Plan of Action, item 2, revise the completion date to develop and implement procedures, including training, that define procurement, handling and storage activities for AQ-NCS items and services from December 31, 1996 to February 28, 1997.

It is expected that most of the activities (i.e. development of NCSAs/NCSEs) required by Issue 8 will be completed by November 30, 1996 as scheduled. However, there are several issues that have arisen in the X-705 Building and the Cascade that require changes in operational philosophy or minor facility modifications based on drafted NCSAs/NCSEs in order to ensure that NCS controls meet double contingency. Examples of these changes include removing bypass piping to prevent the possibility of filling an unfavorable geometry tank, installing an isolation valve, or restricting the weight of alumina in traps to increase allowable assay. These changes are being handled as expeditiously as possible. Additional issues are likely to arise that will require the same effort as those referenced above as remaining NCSAs and NCSEs are completed and the NCSA/TSR Transition for the Cascade is implemented (Cascade transition currently scheduled for January 13, 1997). The additional time will allow the completion of minor modifications required to implement the NCSAs and the appropriate handling of any future issues presented as a result of completing the remaining NCSAs, NCSEs and NCSA/TSR Transition. This schedule will continue to assure completion of these actions prior to NRC Transition to NRC Regulatory Oversight which was the basis for the original due dates, and will allow for safety enhancing changes to be made.

The extension for completion of AQ-NCS related action items in Issues 9, 23, 24, 30 and 32 are required to take the completed NCSAs and NCSEs addressed by Issue 8 and flow the NCS requirements (e.g., the identification of AQ-NCS items) into Procedures and Training lesson plans. More than one calendar month is required to logistically implement the NCSAs by preparing and distributing procedures; preparing, scheduling and administering training; preparing postings, labels and other necessary floor markings and performing the NCS

verification walkthrough. The additional time will allow reasonable scheduling of the work and the training of personnel to meet the implementation requirements and to enhance safety.

PORTS will continue to operate under the commitments identified in the Compliance Plan Justification For Continued Operation section for each Issue impacted by this change. In essence, PORTS shall operate the plant safely by utilizing existing nuclear criticality safety controls and specifications previously identified in historical documents and no new operation involving greater than 1 wt% or 15 grams of  $^{235}\text{U}$  shall commence without the completion of NCSA and NCSE documentation. The revised scheduled completion dates continue to ensure that the effort to formally document the nuclear criticality safety analysis and double contingency or other basis for acceptance of PORTS operations (such as a Technical Safety Requirement (TSR) control) is completed prior to the NRC transition date of March 3, 1997 and provides the maximum safety benefit.

<b>Proposed Certificate Amendment Request Portsmouth Gaseous Diffusion Plant Letter GDP96-0190 Removal/Insertion Instructions</b>	
<b>Remove Pages</b>	<b>Insert Pages</b>
<b>COMPLIANCE PLAN DOE/ORO-2027/R3, Change A</b>	
<b>Issue 8</b> Page 3	<b>Issue 8</b> Page 3
<b>Issue 9</b> Pages 3/4	<b>Issue 9</b> Pages 3/4
<b>Issue 23</b> Pages 5/6	<b>Issue 23</b> Pages 5/6
<b>Issue 24</b> Pages 3/4, 5/6	<b>Issue 24</b> Pages 3/4, 5/6
<b>Issue 30</b> Pages 9/10	<b>Issue 30</b> Pages 9/10
<b>Issue 32</b> Pages 5/6	<b>Issue 32</b> Pages 5/6



response to NCS deficiencies and assessment findings also continue to strengthen the NCS controls. Each new operation involving 1 wt % or higher  $^{235}\text{U}$  and 15 grams or more  $^{235}\text{U}$  will be evaluated, including an evaluation for double contingency, and will have complete NCSA and NCSE documentation prepared before commencing the new operation.

### PLAN OF ACTION AND SCHEDULE

All new operations that require NCS approval will have properly documented and implemented NCSAs and NCSEs that have been approved in accordance with the NCS program requirements contained in the approved Certificate prior to startup. Formal NCSAs and NCSEs will be completed for all current operations involving uranium enriched to 1 wt % or higher  $^{235}\text{U}$  and 15 grams or more  $^{235}\text{U}$  by January 31, 1997, and will be properly documented and approved in accordance with the NCS program requirements contained in the approved Certificate. The procedural changes to resolve the administrative noncompliances in the nuclear criticality safety program will be completed by November 30, 1996. All aspects of Technical Safety Requirement 3.9 implementation and its associated tentacles for NCS will be in place no later than the transition to NRC regulatory oversight.

### SUMMARY OF REQUIREMENTS, COMMITMENTS, AND NONCOMPLIANCES

Issue: Nuclear Criticality Safety Approval Documents	
Code of Federal Regulations	Part
Title 10	76.35(a)(5), (6), and (7); 76.85; 76.87(c)(3)
Application Commitment	Section
Safety Analysis Report	5.2.2.3
Technical Safety Requirements	3.9.1.c, 3.11
Application Noncompliance Statement	Section
Safety Analysis Report	5.2.4.1, 5.2.4.2, 5.2.4.6, 5.2.4.9, 5.2.4.10, 5.2.4.11



## DESCRIPTION OF NONCOMPLIANCE

There are inconsistencies between the specifications in NCSAs and the supporting implementation procedures and work-site postings. The known inconsistencies are minor ambiguities, small discrepancies in dimensions, and variances in format or location of postings.

There are also administrative aspects of the nuclear criticality safety program implementation, including those related to ANSI/ANS-8 standards, that have not yet been proceduralized or documented.

## JUSTIFICATION FOR CONTINUED OPERATION

The plant's 40-year history of safe operation with fully enriched uranium demonstrates the safety of the nuclear criticality controls for uranium in the physical and chemical forms employed in the facility. Corrective actions in response to the NCS violations and assessment findings have continued to strengthen the NCS controls. With USEC production at a reduced maximum enrichment of 10 wt %  $^{235}\text{U}$  (and the purge gas section limited to 20 wt %  $^{235}\text{U}$ ), operations designed for fully enriched  $^{235}\text{U}$  now have increased criticality safety margins.

Some inconsistencies exist between the NCSA specifications, the implementing procedures, and the work-site postings as a legacy from earlier times when the format, content, and update practices were less formal than currently required by either DOE or NRC for NCS documentation and controls. These deviations have been and are being corrected whenever they are discovered during operations, maintenance, or walk-through and other inspections. For example, in late 1994 a verbatim-compliance walkdown review was performed of the existing NCS documentation to verify the flowdown of the NCS requirements into plant postings. The identified deviations in NCS controls (including unspecified tolerances on separation distances; missing or unclear specification limits; and missing, inconsistently worded, or out-of-date postings) were investigated, characterized, and resolved to upgrade the NCS controls. Resolution of remaining documentation deficiencies will coincide with the ongoing Nuclear Safety Upgrade initiative (and with the compliance plan issue "Nuclear Criticality Safety Approval Documents").

Some other implementation inconsistencies resulted from the process of upgrading the overall NCS posting system. After developing and revising NCSA and NCSE documentation, the procedures and postings are upgraded before the new or revised NCSAs and NCSEs are put into effect.

The results of the 1994 verbatim-compliance walkdown showed that the identified deviations between NCSA specifications and postings were minor ambiguities, small discrepancies in dimensions, or variances in format or location of postings. Based on this sampling of representative NCSAs, the risks associated with any unidentified deviations are extremely low for operations meeting the double-contingency principle because at least two independent and concurrent process changes can be accommodated before a criticality accident is possible. The operations that do not meet the double contingency principle have a similar level of assurance of safety through moderation controls and associated Technical Safety Requirements as discussed in Application section 5.2.2.3.

The NCSAs being revised under NCS document upgrade programs cover operations existing prior to July 1, 1993. The majority of the requirements are already in the procedures for the existing process operations. Verification of the NCS requirements for the upgraded NCSAs will be completed by February 28, 1997. Action statements and operating limits from the Technical Safety Requirements will be incorporated into operational procedures by the date that the NRC assumes regulatory authority for PORTS. If an administrative requirement for double contingency control is found to be missing during the verification, the procedure or checklist modification to implement such a requirement will be expedited through the procedure change process and other appropriate actions will be taken. Otherwise, formal revision of the procedures will proceed according to the procedure upgrade schedule.

Implementation of container handling and storage requirements is currently assured through the use of postings and other administrative aids. Procedural guidance for these requirements is being developed for a scheduled completion date of February 28, 1997.

#### **PLAN OF ACTION AND SCHEDULE**

A program is in place to review all NCSAs in order to identify and track the designated NCS conditions, specifications, and controls and to verify their full implementation. Particular attention is being focused on ensuring consistency between each NCSA and the operation including work-site postings. The verification program (of the roughly 150 operating procedures and 150 postings) will be completed for all current fissile material operations, prior to NRC assuming regulatory oversight of PORTS for NCSAs that need to flow into Technical Safety Requirements. Identification of the remaining NCSA requirements to be flowed-down into procedures will be completed by January 31, 1997. If an administrative requirement for double contingency controls is found to be missing during the verification, the procedure or checklist modification to implement such a requirement will be expedited through the procedure change process and other appropriate actions will be taken. Otherwise, formal revision of the procedures will proceed according to the procedures upgrade program, which is scheduled to be completed by December 31, 1997. A procedure for container handling and storage will be developed prior to February 28, 1997.

The procedural changes to resolve the administrative noncompliances in the Nuclear Criticality Safety Program (from SAR Section 5.2.4 and as identified in the Summary of Requirements and Commitments table below) will be completed by December 2, 1996.

All aspects of Technical Safety Requirement 3.9 implementation and its associated tentacles for NCS will be in place no later than the transition to NRC regulatory oversight.

The plant-wide procedure upgrade initiative will provide additional assurance of the full and proper flow-down of NCS conditions and specifications to operating procedures and postings. The compliance plan item entitled "Procedures Program" addresses the implementation of operating procedures. The scheduled completion date for the procedure upgrade initiative is December 31, 1997.

If a new or revised NCSE identifies the need for modifications to the existing plant configuration, affected activities will be curtailed and will not be restarted until either (1) the plant configuration is modified or (2) the activity is modified so that it can be performed safely in the current configuration. If the plant configuration or activity is modified, the Plant Operations

Configuration Management Program element is provided in the Compliance Plan issue entitled "Systems Approach to Training."

The above discussion regarding the ongoing efforts to develop and implement the Configuration Management Program; the establishment of the system boundaries for the liquid UF<sub>6</sub> systems; the identification, field verification, and documentation of the items within the system boundaries; and the current change control process provides justification that the plant can continue to operate safely until the Configuration Management Program is in place.

## **PLAN OF ACTION AND SCHEDULE**

The actions required to complete the development and implementation of the Configuration Management Program and the schedule for completion of these actions are given here.

### **1. Program Management**

- Identify and document all Q items, AQ-NCS items, and other AQ items, including system boundaries and support systems required for performance of the intended safety function, to be included in the scope of the Configuration Management Program. The scheduled completion dates for these actions are December 31, 1996, for Q items; February 28, 1997, for AQ-NCS items; and October 1, 1997, for other AQ items.
- Develop the flowdown of commitments from the Technical Safety Requirements, the Safety Analysis Report, and other plans and programs to procedures and training. The scheduled completion date for this action is in accordance with the Plan of Action and Schedule provided in the Compliance Plan issue entitled "Procedures Program."
- Incorporate new Technical Safety Requirements into the surveillance testing and administrative procedures. The procedure development and the associated training required to resolve this item will be completed according to the plan of action and schedule provided in the Compliance Plan issue entitled "Procedures Program."

### **2. Design Requirements**

- Develop the baseline documentation that establishes the design requirements for all Q systems/items, including support systems required for performance of the intended safety function. The scheduled completion date for this action is December 31, 1996.
- Review all Nuclear Criticality Safety Approvals and Nuclear Criticality Safety Evaluations to identify AQ-NCS items (items which support the nuclear criticality double contingency principle); to identify and document the designated design requirements and system boundaries, including support systems required for performance of the intended safety function; and to verify the implementation of these requirements. To the extent completed, this information will be maintained and made available to the NRC, before regulatory jurisdiction, for planned inspection activities. The scheduled completion date for this action is February 28, 1997.

- Identify, document, and communicate definitive boundaries for the other AQ systems. Identify and document the design requirements for these AQ systems/items, including support systems required for performance of the intended safety function, for which the design requirements must be known. The scheduled completion date for this action is October 1, 1997.

### 3. Document Control

- Develop improved records management and document control programs to satisfy the needs of the Configuration Management Program. Develop and implement the required procedures.
- Train appropriate plant personnel in the requirements of these programs and procedures.

The program and procedure development and associated training required to resolve this noncompliance will be completed according to the plan of action and schedule provided in the Compliance Plan issue entitled "Records Management and Document Control Programs."

### 4. Change Control

- Upgrade the four core engineering procedures that specify the requirements for the change control process to ensure the identification, technical and safety review, approval, implementation, validation, documentation, and recording of plant changes. The scheduled completion date for this action is 7/31/96.
- Train appropriate personnel to ensure proper implementation and application of these upgraded core procedures. The scheduled completion date for this action is 7/31/96.
- Develop or upgrade remaining engineering procedures that are associated with the change control process and train appropriate personnel on these new or upgraded procedures. The scheduled completion date for this action is March 31, 1997.

### 5. Assessments

- Develop procedures required to implement an assessment program to systematically evaluate the development and effective implementation of the Configuration Management Program elements and related processes.
- Train appropriate personnel to ensure proper implementation and application of these procedures.

The procedure development and the associated training required to resolve this area of noncompliance will be completed according to the plan of action and schedule provided in the Compliance Plan issue entitled "Procedures Program."

### 6. Training

- Implement a training program for plant personnel relied upon to operate, maintain, or modify the plant. Include initial training on improved or newly developed programs and



In addition, the maintenance organizations have initiated special provisions and interim commitments for the safety systems. These provisions, which are now in place and are incorporated into existing procedures, and will be incorporated into new procedures as they are developed, include the following actions.

1. A work package is prepared prior to commencement of any corrective maintenance work on safety systems. The minimum requirements of a work package for safety system maintenance include: a maintenance service request; a planning checklist; written work instructions; and a safety system data sheet, which provides verification of post-maintenance testing. Depending on the scope of the work, the package may also include equipment specific procedures or checklists and quality control inspection, nuclear criticality safety analysis, radiation protection, OSHA, or operational requirements. The composition of a work package is dependent on the maintenance to be performed and is defined in the work control procedure.
2. Systems engineers have been assigned specific responsibility for the technical aspects of designated safety systems. The systems engineers provide technical support for maintenance activities of these systems, including assistance in work package preparation, determination of post-maintenance test requirements, observation of surveillance testing, review of procedures, and input to the plant preventive maintenance program. Systems engineers are required to have an engineering education or an appropriate technical background and a basic knowledge of plant systems, principles of gaseous diffusion, administrative procedures and policies, plant layout and location of components of assigned systems, technical specifications, and in-service inspection requirements.

#### Interim Regulatory Commitments

The following commitments derived from the ROA requirements will remain in effect until replaced by Application commitment implementation.

1. A corrective maintenance program shall be implemented to ensure that prompt and effective maintenance is performed on malfunctioning nuclear safety systems, safeguards, and security equipment.
2. A preventive maintenance program shall be implemented to ensure the operability of nuclear safety systems, safeguards, and security equipment.
3. A documented instrument calibration program, employing standards traceable to the national standards system or to nationally accepted standards, shall be implemented for the calibration of equipment and monitoring devices necessary for the proper maintenance and operation of nuclear safety systems and safeguards equipment.
4. Controls shall be established to ensure safety systems are not disabled or diminished by planned activities.
5. Work on safety systems shall be controlled and performed with the use of approved procedures and/or work instructions. The procedures and work instructions shall be based upon established and well-recognized codes and standards in applicable areas such as welding,

electrical, piping, and instrumentation. As applicable, codes and standards shall be identified in the procedures as source references.

## PLAN OF ACTION AND SCHEDULE

The actions required to complete the maintenance program are the following:

- Develop and implement a maintenance history program. The scheduled completion date for this action is September 30, 1997.
  - Develop a master equipment list for safety critical equipment.
  - Implement a new computer-based maintenance management system with the capability to collect and trend the data.
- Develop guidance for cleanliness control and measures to prevent entry of extraneous material into a closed system. The scheduled completion date for this action is July 31, 1996.
- Upgrade the current work control process to provide the committed level of planning and work package development for Q, AQ-NCS, and other AQ items. The scheduled completion dates for these actions are February 28, 1997, for AQ-NCS items; April 30, 1997, for Q items; and June 30, 1998, for other AQ items.
  - Centralize all planning and work control functions in the Work Control organization. (Complete)
  - Revise the work control procedure.
  - Develop and provide training on the upgraded work control process.
- Upgrade the preventive maintenance program to meet the commitments for greater formalism. The scheduled completion dates for these actions are February 28, 1997, for AQ-NCS items; March 31, 1997, for Q items; and June 30, 1998, for other AQ items.
  - Develop an overall performance indicator to measure preventive maintenance effectiveness.
  - Identify current preventive maintenance performed on Q, AQ-NCS, and other AQ items.
  - Revise the preventive maintenance program procedure to establish a formal mechanism to justify and document changes to Q, AQ-NCS, and other AQ item requirements.
  - Develop the technical/historical basis for use in evaluating preventive maintenance task adequacy.
- Revise the measuring and test equipment calibration program to meet the more formal requirements. The scheduled completion dates for these actions are December 31, 1996, for Q measuring and test equipment; February 28, 1997, for AQ-NCS measuring and test equipment; and December 31, 1997, for other AQ measuring and test equipment.
  - Implement procedures that define and control the overall measuring and test equipment program. (Complete)



- Develop and implement individual calibration procedures for Q, AQ-NCS, and other AQ SSCs.
- Provide training on calibration requirements to affected coordinators, managers, technicians, and users.
- Identify the procedural deficiencies for performing corrective maintenance, preventive maintenance, calibration, and surveillance testing of Q, AQ-NCS, and other AQ SSCs, and develop a composite listing of the procedures requiring revision, development, or conversion. The scheduled completion dates for these actions are October 31, 1996, for Q SSCs; January 31, 1997, for AQ-NCS SSCs; and October 31, 1997, for other AQ SSCs.
- Develop procedures and provide the associated training of appropriate personnel for the performance of surveillance tests which are required to support Technical Safety Requirements. This action will be completed prior to the NRC assuming regulatory authority.
- Revise, develop, or convert corrective maintenance, preventive maintenance, calibration, and surveillance test procedures for Q, AQ-NCS, and other AQ SSCs. The scheduled completion dates for these actions are February 28, 1997, for AQ-NCS items; March 31, 1997, for Q items; and June 30, 1998, for other AQ items.
- Develop training materials for the work control, surveillance testing, instrument calibration, and corrective and preventive maintenance procedures and provide the associated training of appropriate personnel. The scheduled completion dates for these actions are February 28, 1997, for AQ-NCS items; March 31, 1997, for Q items; and June 30, 1998, for other AQ items.
- Identify and control the vendors' manuals used for maintenance of Q equipment, including entering them into the document control and records management system. The scheduled completion date for this action is March 31, 1997.
  - Identify vendor manuals used for maintenance activities of Q equipment.
  - Verify appropriate vendors' manuals for accuracy and completeness.
  - Enter vendor manual data into the records management and document control system.

The procedure upgrades and associated training to address this area of the noncompliance will be completed in coordination with the plans and schedules set forth in the Compliance Plan issues "Procedures Program" and "Systems Approach to Training."

## SUMMARY OF REQUIREMENTS, COMMITMENTS, AND NONCOMPLIANCES

Issue: Maintenance Program	
Code of Federal Regulations	Part
Title 10	76.87(c)(7)
Application Commitment	Section
Safety Analysis Report	3.5.1, 5.3.5, 5.6.5, 5.6.5.1, 5.6.5.2, 5.6.5.3, 5.7.3, 5.7.3.2, 5.7.3.4, 5.7.3.5, 6.1.1, 6.1.1.9, 6.1.1.11, 6.1.1.14, 6.1.1.20, 6.1.1.25, 6.3.5.2.3.6, 6.3.5.2.4.2, 6.3.5.4.2, 6.3.5.6, 6.3.5.7, 6.4, 6.5.7, 6.6.1, 6.6.3, 6.6.3.1, 6.6.5, 6.6.13, 6.8.2.2, 6.8.2.3, 6.8.2.4, 6.10.1.13, 6.11.1, 6.11.5, 6.11—Appendix A
Technical Safety Requirements	3.2.2.b, 3.9.1, 3.15, 3.24
Fundamental Nuclear Materials Control Plan	2.2.7, 2.6, 4.1, 4.1.1, 5.1.2, 5.2, 5.2.1, 5.2.3, 13.1
Emergency Plan	4.1.5, 7.6, 8.2
Quality Assurance Program	1-2.18, Appendix A
Application Noncompliance Statement	Section
Safety Analysis Report	6.4.13.1, 6.4.13.2, 6.4.13.3, 6.4.13.4, 6.4.13.5

place, the elements that are not yet fully implemented are identified in the Description of Noncompliance, above. Specific actions required to complete the program are itemized here, along with scheduled completion dates. Each item corresponds to the like-numbered item in the Description of Noncompliances section.

1. By July 31, 1996, incorporate into the Procedure Control Process procedure the SAR-6.11.4.1 criteria for use by responsible management in complying with TSR 3.9 by identifying applications requiring additional written procedures.
2. (Deleted)
3. (Deleted)
4. Document the criteria for use in determining when work must be stopped because a procedure cannot be performed as written. [Completed]
5. (Deleted)
6. By the date that the NRC assumes regulatory authority for PORTS, incorporate into the Procedure Control Process procedure the SAR-6.11.4.5 criteria for identifying procedures that TSR 3.9 requires review by the PORC.
7. (Deleted)
8. Incorporate action statements and operating limits from the Technical Safety Requirements into operational procedures by the date that the NRC assumes regulatory authority for PORTS.
9. Issue the required operational policy statements and implement new or updated procedures (including required training) to fully implement the Quality Assurance Program or other activities identified in the application in accordance with the following schedule:

Operational policy statements	Completed
Level 2, 3, and 4 AQ-NCS procedures (unless covered by item 8)	February 28, 1997
Level 2, 3, and 4 Q procedures (unless covered by item 8)	March 31, 1997*
Level 2, 3, and 4 other AQ and NS procedures	December 31, 1997*

\*Refer to Issue 24 for later Maintenance Program procedure completion dates.

10. Issue analytical laboratory procedures updated to current requirements by December 31, 1997.
11. Complete all overdue Level 2, 3, and 4 AQ procedure periodic reviews by December 31, 1997.
12. The PORC will review all procedures designated as In-Hand and procedures that involve liquid UF<sub>6</sub> handling activities within a 5-year period after the date that the NRC assumes

regulatory authority for PORTS. This commitment pertains only to those procedures which will not otherwise be reviewed by the PORC (as required by Section 6.11.4.1), or by a PORC subcommittee, before the expiration of the 5-year period. Procedures in this scope have been, and will continue to be, reviewed by a PORC subcommittee, thereby satisfying this commitment for those specific procedures.

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13. All aspects of TSR 3.9 implementation and its associated tentacles shall be in place no later than the date that the NRC assumes regulatory authority for PORTS. Procedures required by Technical Safety Requirement 3.9.1 shall be in place by the assumption of regulatory authority by NRC except as specified in the Compliance Plan.

4. Inspection and acceptance testing of specified items and processes shall be conducted using established performance criteria. USEC implements the requirements for inspection and acceptance testing of items and processes in the procurement, receipt inspection, and the maintenance functions. Receipt inspection is a responsibility of the Production Support Organization. The inspection process and support from the Production Support Organization are discussed in Application Section 6.4, Maintenance.

## **PLAN OF ACTION AND SCHEDULE**

In order for the USEC quality assurance program to satisfy each of the applicable requirements of ASME NQA-1-1989 and the requirements of the QAP; procedures, instructions, and other documents providing for the implementation of the quality assurance program are required.

The required actions to complete the development and implementation of the QAP for noncompliances identified in other sections of the Application are discussed in the corresponding Compliance Plan issues. (For example, the actions required to address the Records Management noncompliance, described in Application Section 6.10, are described in PORTS Compliance Plan Issue 29 and PGDP Compliance Plan Issue 26.)

The required actions to complete the development and implementation of the quality assurance program and the schedule for completion of the actions for noncompliances described in the QAP are as follows.

1. Develop and implement procedures, including personnel training, for the scheduling and conduct of internal and supplier audits, including auditing the development, maintenance, adequacy, and effectiveness of the QAP, by December 31, 1996.
2. Develop and implement procedures, including personnel training, that define procurement, handling, and storage activities for AQ-NCS items and services by February 28, 1997; for Q items and services by March 31, 1997; and for other AQ items and services by December 31, 1997.

## SUMMARY OF REQUIREMENTS, COMMITMENTS, AND NONCOMPLIANCES

Issue: Quality Assurance Program Implementation	
Code of Federal Regulations	Part
Title 10	76.93
Application Commitment	Section
Safety Analysis Report	6.4, 6.8
Quality Assurance Program	1 through 2.18, Appendixes A and C
Technical Safety Requirements	3.5
Application Noncompliance Statement	Section
Quality Assurance Program	Appendix B



**United States Enrichment Corporation (USEC)  
Proposed Certificate Amendment Request  
Plan for Achieving Compliance with NRC Regulations at the  
Portsmouth Gaseous Diffusion Plant  
[Compliance Plan] Issues 8, 9, 23, 24, 30, 32  
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 Decrease in the Effectiveness of the Plant's Safety, Safeguards or Security Programs

The specific date for completion of the NCSAs and NCSEs for current plant operations nor their results are addressed in plant safety, safeguards or security programs contained in the Application for United States Nuclear Regulatory Commission Certification for the Portsmouth Gaseous Diffusion Plant. Therefore, the effectiveness of these programs is unaffected by these changes.

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

Although Condition 8 of the proposed Certificate of Compliance specifies, in part, that USEC will conduct its operations in accordance with the statements and representations contained in the Compliance Plan, none of the Conditions to the Proposed Certificate of Compliance for Operation of Gaseous Diffusion Plants (GDP-2) specifically address the due dates for Compliance Plan Issues. Thus, the proposed due date changes have no impact on any of the Conditions to the Proposed Certificate of Compliance.

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

The approximate due date increase of two months for Compliance Plan Issues 8, 9, 23, 24, 30 and 32 will not significantly affect the Compliance Plan conditions. PORTS will continue to operate under the commitments identified in the Compliance Plan Justification For Continued Operation for each of the affected Issues section. In essence, PORTS shall operate the plant safely by utilizing existing nuclear criticality safety controls and specifications previously identified in historical documents and no new operation involving greater than 1 wt% or 15 grams of <sup>235</sup>U shall commence without the completion of NCSA and NCSE documentation.

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

The extension of the time required to provide the necessary formal documentation of previously analyzed and controlled nuclear criticality concerns will not increase the probability of occurrence or consequences of the postulate criticality accidents currently identified in the SAR. Additionally, PORTS will continue to operate in accordance with the Justification for Continued Operations provided in each of the affected Compliance Plan Issues. Therefore, there will be no significant increase in the probability of occurrence or consequences of previously evaluated accidents.

5. No New or Different Type of Accident

The extension of the time required to provide the necessary formal documentation of previously analyzed and controlled nuclear criticality concerns will not create any new or different type of accident. Additionally, PORTS will continue to operate in accordance with the Justification for Continued Operations provided in each of the affected Compliance Plan Issues. Therefore, there will be no new or different type of accident created by this change.

6. No Significant Reduction in Margins of Safety

The extension of the time required to provide the necessary formal documentation of previously analyzed and controlled nuclear criticality concerns will not reduce the margin of safety as defined in the Technical Safety Requirements document. Additionally, PORTS will continue to operate in accordance with the Justification for Continued Operations provided in each of the affected Compliance Plan Issues. Therefore, there will be no significant reduction in margins of safety as a result of this change.

7. No Significant Decrease in the Effectiveness of any Programs or Plans Contained in the Certificate Application

The extension of the time required to provide the necessary formal documentation of previously analyzed and controlled nuclear criticality concerns will not decrease the effectiveness of any program or plan contained in the Application for United States Nuclear Regulatory Commission Certification for the Portsmouth Gaseous Diffusion Plant. Given that the programs described in the Application are not required to be implemented until Transition to NRC Regulatory Oversight and the fact that the changes to Compliance Plan activities discussed herein will be completed by this date, there is no impact on the effectiveness of these programs or plans.

8. The proposed changes do not result in undue risk to 1) public health and safety, 2) common defense and security, and 3) the environment.

The extension of the time required to provide the necessary formal documentation of previously analyzed and controlled nuclear criticality concerns does not increase the probability or consequence of any potential criticality accident. Postulated criticality accidents at the PORTS plant do not impact the general public and only have minimum potential to adversely affect the health and safety of the local work force. As such, this change does not represent an undue risk to public health and safety. Similarly, delays in identifying AQ-NCS items for inclusion into plant procedures, programs, and plans will not pose an undue risk to the public health and safety given that existing operations would continue to comply with provision contained in the Justifications for Continued Operations described in the respective Compliance Plan Issues. In addition, this revision has no impact on plant effluents or on the programs and plans in place to implement physical security. The revision in the committed due date will ensure the adequate preparation and management review of newly developed NCS documentation and will ultimately provide added safety and assurance of NCS principles. These changes represent no undue risk to the health and safety of the public and workers and poses no undue risk to the environment or the common defense and security.