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Plan for Achieving Compliance with NRC Regulations at the Paducah Gaseous Diffusion Plant

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Prepared by the
DOE Compliance Plan Project Team

Prepared for
U.S. Department of Energy
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This document was prepared by the U.S. Department of Energy (DOE) Compliance Plan Project Team under the leadership of R. M. DeVault, DOE. This document was prepared and approved based upon the most current draft of the United States Enrichment Corporation (USEC) application for Nuclear Regulatory Commission (NRC) certification available to DOE as of the publication date. It is subject to change to reflect revisions to that application and the more detailed understanding of the NRC requirements to be obtained during the NRC review of the certification application. This document was prepared by DOE solely for provision to USEC for submittal to the NRC. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, express or implied, or assumes any legal liability of responsibility for any use of this document other than that for which it was intended or represents that the use, by any third party, of any information, apparatus, product or process disclosed in this document would not infringe privately owned rights.

Plan for Achieving Compliance with NRC Regulations at the Paducah Gaseous Diffusion Plant
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APPROVALS

This document was prepared and approved based on the United States Enrichment Corporation application for Nuclear Regulatory Commission (NRC) certification available to the U.S. Department of Energy as of the publication date. It is subject to change to reflect revisions to that application and the more detailed understanding of the NRC requirements to be obtained during the NRC review of the certification application.

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CONTENTS

I. Technical Safety Requirements Noncompliances

II. Safety Analysis Report Noncompliances

*The issues marked by an asterisk are substantially the same for both gaseous diffusion plants.

III. Fundamental Nuclear Material Control Plan Noncompliances

See Appendix

IV. Physical Security Plans Noncompliances

No Issues Identified

V. Emergency Plan Noncompliances

VI. Quality Assurance Program Noncompliances

VII. Radioactive Waste Management Program Noncompliances

VIII. Depleted Uranium Management Plan Noncompliances

No Issues Identified

*The issues marked by an asterisk are substantially the same for both gaseous diffusion plants.

Paducah Matrix of Compliance Issues, 10 CFR Requirements, and Application Documents

10 CFR Requirement	Application Document	Application Section	Issue Title	Page
76.35(a), 76.87(a) and (c)	Not applicable	Not applicable	Scope of Technical Safety Requirements	I-3
76.51, 76.87(a) and (d)	Technical Safety Requirements Safety Analysis Report	1.1, 3.7 6.1.3.1	Transition to Technical Safety Requirements	I-5
76.87(a) and (d)	Technical Safety Requirements Quality Assurance Program	1.6.3.1 through 1.6.3.5 2.19	Surveillance Program	I-9
76.35(a), 76.85, 76.87(c)	Safety Analysis Report Technical Safety Requirements Quality Assurance Program	4.3.2.2, 4.4.1, 4.4.2, 5.2.2.1, 5.2.2.2, 5.2.2.5, 6.3.1.3, 6.3.2, 6.4.1 3.4, 3.6.1, 3.6.2 2.2.3, 2.5.1, 2.19	Operations Program	I-13
76.87(a), (c), (d)	Technical Safety Requirements Quality Assurance Program	3.6.2 2.19	Maintenance Program	I-19
76.35(a), 76.85	Safety Analysis Report	1.1, 1.4, 2, 4.1	Update the Application Safety Analysis Report	II-3
76.35(a), 76.85, 76.87(c)	Safety Analysis Report	3.2.4.1, 3.2.4.8, 3.2.5.4	C-360 Crane Upgrades	II-7
76.35(a), 76.85, 76.87	Safety Analysis Report	5.2.2.2	Nuclear Criticality Safety Approval Documents	II-9

Paducah Matrix of Compliance Issues, 10 CFR Requirements, and Application Documents (Continued)

10 CFR Requirement	Application Document	Application Section	Issue Title	Page
76.35(a), 76.87(c), 76(in general)	Safety Analysis Report	5.2.2.2, 5.2.2.6, 5.2.2.7	Nuclear Criticality Safety Implementation	II-11
76.89	Safety Analysis Report	5.2.2.4	Criticality Accident Alarm System Coverage	II-13
76.89(a)	Safety Analysis Report	5.2.2.4	Coverage Exemption for Criticality Accident Alarm System	II-15
20.1101(a), 76.60(d)	Safety Analysis Report	5.3.1.4	Radiation Protection Procedures	II-17
20.1501(a), 76.60(d)	Safety Analysis Report	5.3.2.2	NVLAP Certification	II-19
20.1501(a), 20.1902(a) through (e), 20.1904(a), 76.60(d)	Safety Analysis Report	5.3.2.5, 5.3.3.1	Posting of Radioactive and Hazardous Materials	II-21
76.87(c)	Safety Analysis Report	5.4.2	Fire Alarm System Reliability	II-25
76.87(c)	Safety Analysis Report	5.4.2	Fire Protection Water Pump Reliability	II-27
76.87(c)	Safety Analysis Report	5.4.3	Fire Protection Equipment	II-29
76.60(g), 76.87(c)	Safety Analysis Report	5.5	Packaging and Transportation	II-31
76.95	Safety Analysis Report	6.3.2	Systems Approach to Training	II-33

Paducah Matrix of Compliance Issues, 10 CFR Requirements, and Application Documents (Continued)

10 CFR Requirement	Application Document	Application Section	Issue Title	Page
76.10(c), 76.35(a) and (k), 76.60(c) through (i), 76.68(c), 76.85, 76.87(c) and (d), 76.91(j) and (l), 76.93	Safety Analysis Report	3, 4.3.1.1, 4.3.2.3, 4.4.1, 5.1.1.1.3, 5.1.1.2.3, 5.2.2.1, 5.2.2.2, 5.2.2.5, 5.3.1.3, 5.3.1.4, 5.4.2, 5.4.3, 5.5, 6.2.2, 6.3.1.3, 6.4.1, 6.4.2.1, 6.4.2.2, 6.4.2.3, 6.4.2.4, 6.4.2.5, 6.5, 6.6.2, 6.7.1, 6.7.2	Procedures Program	II-35
	Technical Safety Requirements	3.6.1, 3.6.2		
	Fundamental Nuclear Materials Control Plan	3		
	Security Plan for Protection of Classified Matter	5		
	Emergency Plan	Plan Summary, 7.1, 7.5		
	Quality Assurance Program	2.2.3, 2.3.1, 2.4.2, 2.5.1, 2.6.3, 2.7.2, 2.8.2, 2.9.2, 2.10.3, 2.11.1, 2.12.3, 2.13.2, 2.14.2, 2.15.3, 2.16.2, 2.17.3, 2.18.1, 2.19		

Paducah Matrix of Compliance Issues, 10 CFR Requirements, and Application Documents (Continued)

10 CFR Requirement	Application Document	Application Section	Issue Title	Page
76.7(a), 76.9(a) and (b), 76.10(a), 76.31, 76.33, 76.35, 76.36(a), 76.45(a) and (c), 76.51, 76.60(c) through (i), 76.68, 76.70(a), 76.70(d), 76.70(e), 76.87(d), 76.91(h) and (i), 76.120, 76.121	Safety Analysis Report	5.5, 6.6.1, 6.6.2, 6.6.2.2, 6.7.1.12	NRC Administrative/Reporting Requirements Program	II-49
	Technical Safety Requirements	3.7		
	Fundamental Nuclear Materials Control Plan	12.4		
	Security Plan for Protection of Classified Matter	17		
	Security Plan for Transportation of Special Nuclear Material	5.2		
	Emergency Plan	3.2.1, 3.2.2, 3.3, 4.4.3.1		
	Quality Assurance Program	2.15.3		

Paducah Matrix of Compliance Issues, 10 CFR Requirements, and Application Documents (Continued)

10 CFR Requirement	Application Document	Application Section	Issue Title	Page
76.31, 76.35, 76.36, 76.55, 76.60(c) through (i), 76.68(b) and (c), 76.83(d), 76.87(c) and (d), 76.91, 76.93, 76.121(b)	Safety Analysis Report	5.1.2, 5.1.3.3, 5.2.2.2, 5.2.2.8, 5.3.1.3, 5.3.1.4, 5.3.2.2, 5.3.2.5, 5.3.2.7, 5.3.5, 5.3.6, 6.2.1, 6.2.4, 6.3, 6.3.8.3, 6.4.2.3, 6.4.2.6, 6.6.2.4, 6.7, 6.7.1, 6.7.2, 6.8.4	Records Management and Document Control Programs	II-57
	Technical Safety Requirements	3.2.1, 3.6.1		
	Fundamental Nuclear Materials Control Plan	1.1, 2.2.2, 3, 13		
	Security Plan for Protection of Classified Matter	14		
	Emergency Plan	7.1, 7.2, 7.3, 7.5, 7.6, 8.1, 8.2		
	Quality Assurance Program	2.2.3, 2.2.4, 2.3.1, 2.3.3.5, 2.4.1, 2.5.1, 2.6.1, 2.7.3.2, 2.7.3.3, 2.7.3.6, 2.8.3.4, 2.9.3.3, 2.10.3, 2.11.1, 2.11.3.1, 2.11.3.2, 2.12.3, 2.15.3, 2.16.1, 2.16.2, 2.16.3, 2.17.1, 2.17.2, 2.17.3, 2.18.2, 2.18.3.7, 2.19		
	Radioactive Waste Management Plan	5.2, 5.5		
76.68, 76.93	Safety Analysis Report	6.8	Configuration Management Program Implementation	II-73
	Quality Assurance Program	2.3.1, 2.19		

Paducah Matrix of Compliance Issues, 10 CFR Requirements, and Application Documents (Continued)

10 CFR Requirement	Application Document	Application Section	Issue Title	Page
76.91(h)	Emergency Plan	6.2	Public Warning Sirens and Controls	V-3
76.91(e)	Emergency Plan	6.2.1.2	Public Address System	V-5
76.91(m)	Emergency Plan	7.1 and Plan Summary	Emergency Plan Support Documents	V-7
76.91(j)	Emergency Plan	7.2.2	Training for Emergency Response Organization	V-9
76.93	Quality Assurance Program	2.2.5	Management Assessment	VI-3
76.93	Quality Assurance Program	2.4.1, 2.4.3.1, 2.7.3.6, 2.7.3.7	Procurement	VI-5
76.35(d), 76.93	Quality Assurance Program	2.5.1	Instructions, Procedures, and Drawings	VI-7
76.93	Quality Assurance Program	2.15.1, 2.16.1	Nonconforming Items and Corrective Action	VI-9
20.2006(d), App. F to Part 20, 76.60(d)	Radioactive Waste Management Plan	5.4, 5.5	Quality Control Program for Low-Level Waste Disposal	VII-3

ABBREVIATIONS

ALARA	as low as reasonably achievable
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
CAAS	criticality accident alarm system
CFR	*Code of Federal Regulations*
CM	crisis manager
DOE	U.S. Department of Energy
EG	evaluation guideline
EOC	emergency operations center
EPA	Environmental Protection Agency
EPIP	emergency plan implementing procedure
ERO	emergency response organization
FNMC	fundamental nuclear material control
FSAR	final safety analysis report
GDP	gaseous diffusion plant
JCO	justification for continued operation
LCO	limiting condition for operation
LCS	limiting control setting
MC&A	material control and accountability
MMUS	Martin Marietta Utility Services
NCS	nuclear criticality safety
NCSA	nuclear criticality safety approval
NCSE	nuclear criticality safety evaluation
NMC&A	nuclear material control and accountability
NMSS	nuclear material safety and safeguards
NRC	Nuclear Regulatory Commission
ORO	Oak Ridge Operations Office (of DOE)
OSR	operational safety requirement
PA	public address
PGDP	Paducah Gaseous Diffusion Plant
PORTS	Portsmouth Gaseous Diffusion Plant
PSS	plant shift superintendent
QA	quality assurance
QAP	quality assurance program
ROA	Regulatory Oversight Agreement
SAE	site area emergency
SAR	safety analysis report
SSC	structure, system, and component
TSR	technical safety requirement
USEC	United States Enrichment Corporation

GLOSSARY

Act	The Atomic Energy Act of 1954 (68 Stat. 919), including any amendments to the Act.
administrative controls	The provisions relating to organization and management, procedures, record-keeping, review, audit, and reporting necessary to ensure operation of the gaseous diffusion plant in a safe manner.
alert	A situation in which events may occur, are in progress, or have occurred that could lead to a release of radioactive or other hazardous material(s) but in which the release is not expected to require a response by an off-site response organization to protect persons off-site.
Commission	United States Nuclear Regulatory Commission (NRC) or its duly authorized representatives.
compliance plan	A plan, prepared and approved by the DOE, for achieving compliance with the NRC requirements in 10 CFR 76.
Corporation	United States Enrichment Corporation (USEC), a corporation that is authorized by statute to lease facilities at the gaseous diffusion plants in Paducah, Kentucky, and Piketon, Ohio, from the Department of Energy, or any person authorized to operate one or both of the gaseous diffusion plants pursuant to a plan for privatization of USEC that is approved by the President in accordance with Sections 1501 and 1502 of the Atomic Energy Act of 1954, as amended.
Department	United States Department of Energy (DOE) established by the Department of Energy Organization Act (Public Law 95-91, 91 Stat. 565, 42 U.S.C. 7101 et seq.).
depleted uranium	The by-product residues from the uranium enrichment process in which the concentration of the isotope ^{235}U is less than that occurring in natural uranium.
effective dose equivalent	The sum of the products of the dose equivalent to the body organ or tissue and the weighting factors applicable to each of the body organs or tissues that are irradiated, as defined in 10 CFR 20 (20.1001-20.2402).
gaseous diffusion plant	A plant used for separating the isotopes of uranium or enriching uranium in the isotope ^{235}U using gaseous diffusion technology. Specifically, the gaseous diffusion plants in Paducah, Kentucky, and Piketon, Ohio.

justification for continued operation	A written evaluation describing conditions that demonstrate that operation can continue with adequate safety and safeguards until the identified areas of noncompliance can be eliminated.
Lease Agreement	The agreement entered into as of July 1, 1993, and any subsequent revisions between DOE and USEC.
limiting conditions for operation	The lowest functional capability or performance levels of structures, systems, components, and their support systems required for normal safe operation of the gaseous diffusion plant.
limiting control settings	Settings for automatic alarm or protective devices related to those variables having significant safety functions.
Non-Agreement State	Any State with which the Commission has not entered into an effective agreement under Subsection 274b. of the Act.
operational safety requirements	Requirements defining the conditions, safe boundaries, and management controls used to assure safe operation of a nuclear facility.
produce	When used in relation to special nuclear material, (1) to manufacture, make, produce, or refine special nuclear material; (2) to separate special nuclear material from other substances in which such material may be contained; or (3) to make or to produce new special nuclear material.
radioactive material	Source material, special nuclear material, or by-product material that is possessed, used, transferred, or disposed of under 10 CFR 76.
Regulatory Oversight Agreement	An agreement between DOE and USEC concerning the regulatory oversight of the leased premises at the Paducah and Portsmouth gaseous diffusion plants by DOE with respect to nuclear safety, safeguards, and security requirements.
Safety Analysis Report	A report that includes information which describes the facility, presents the design bases and the limits on the facility's operation, and presents a safety analysis of the structures, systems, components, and the facility as a whole to ensure that the facility can be constructed, operated, maintained, shut down, and decommissioned safely and in compliance with applicable laws and regulations.

safety limits	Those bounds within which the process variables must be maintained for adequate control of the operation and that must not be exceeded in order to protect the integrity of the physical system that is designed to guard against the uncontrolled release of radioactivity.
site area emergency	A situation in which events may occur, are in progress, or have occurred that could lead to a significant release of radioactive or other hazardous material and that could require a response by off-site response organizations to protect persons off-site.
special nuclear material of low strategic significance	(1) Less than an amount of special nuclear material of moderate strategic significance, as defined herein, but more than 15 grams of ^{235}U (contained in uranium enriched to 20% or more in the ^{235}U isotope), or 15 grams of ^{233}U, or 15 grams of plutonium, or the combination of 15 grams when computed by the equation, grams = (grams contained ^{235}U) + (grams plutonium) + (grams ^{233}U); or (2) less than 10,000 grams but more than 1000 grams of ^{235}U (contained in uranium enriched to 10% or more but less than 20% in the ^{235}U isotope); or (3) 10,000 grams or more of ^{235}U (contained in uranium enriched above natural but less than 10% in the ^{235}U isotope).
surveillance requirements	Requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that gaseous diffusion plant operation will be within the safety limits, and that the limiting conditions of operation will be met.
technical safety requirements	Those requirements that define the conditions, safe boundaries, and the management or administrative controls necessary to ensure the safe operation of a nuclear facility and to reduce the potential risk to the public and facility workers from uncontrolled releases of radioactive materials or from radiation exposures due to inadvertent criticality. These requirements consist of safety limits, operating limits, surveillance requirements, administrative controls, use and application instructions, and the bases thereof.

unreviewed safety question	A change that involves any of the following: (1) the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; (2) a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or (3) the margin of safety as defined in the basis for any technical safety requirement is reduced.
uranium enrichment plant	(1) Any plant used for separating the isotopes of uranium or enriching uranium in the isotope ^{235}U, using gaseous diffusion technology; or (2) any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or of enriching uranium in the isotope ^{235}U using gaseous diffusion technology.
withholdable information	Restricted Data, National Security Information, Safeguards Information, Unclassified Controlled Nuclear Information, proprietary data, or other such information required to be withheld from public disclosure by statute or Executive Order or exempted from public disclosure pursuant to 10 CFR 2.790 or 10 CFR 9.17.

INTRODUCTION

The United States Enrichment Corporation (USEC or the Corporation) is submitting its initial application to the United States Nuclear Regulatory Commission (NRC) for a certificate of compliance for the Paducah Gaseous Diffusion Plant (PGDP) in accordance with Section 1701(c) of the Atomic Energy Act of 1954 (AEA), as amended, and Part 76, "Certification of Gaseous Diffusion Plants," of Title 10 of the *Code of Federal Regulations* (10 CFR 76). Section 76.35(b) of 10 CFR requires that the initial Application include

> A plan prepared and approved by DOE [the Department of Energy] for achieving compliance with respect to any areas of noncompliance with NRC's regulations that are identified by the Corporation as of the date of application that includes:
> (1) A description of the areas of noncompliance;
> (2) A plan of actions and schedules for achieving compliance; and
> (3) A justification for continued operation with adequate safety and safeguards.

USEC has identified those aspects of the operations at PGDP that are not currently in full compliance with applicable NRC requirements, and DOE has prepared and approved this Compliance Plan to be submitted to NRC along with USEC's initial application for certification.

As noted above, the regulation assigns to the Corporation the responsibility for identifying to DOE the noncompliances to be addressed in the plan for achieving compliance. The DOE-prepared Compliance Plan includes justifications for continued operation, which describe the provisions to ensure adequate safety and safeguards until the identified areas of noncompliance can be eliminated, and plans of actions and schedules for achieving compliance in these areas. Because many parts of 10 CFR 76 and sections of 10 CFR cited therein are performance based, only the NRC can determine whether the commitments made by USEC are adequate to meet the requirements. Therefore, DOE has not attempted to evaluate the adequacy of the commitments made in the initial application. However, DOE has identified two areas where the initial application fails to address fully the applicable NRC regulations. These are included in the compliance plan as DOE-identified noncompliances. Furthermore, DOE has independently considered whether PGDP has implemented the programs and procedures and installed the required equipment to fulfill the commitments stated in the initial application. Where this is not so, the deficiencies are addressed in this Compliance Plan.

In preparing the Compliance Plan, DOE has reviewed the past operating history of the plant as evidenced by assessments, audits, reviews, event reports, and DOE Regulatory Oversight Program inspections. Where USEC is not in full conformance with the programs and procedures implemented to meet the commitments stated in the initial Application, such noncompliances are also addressed in this Compliance Plan. DOE has also determined that the completion of the plans of action and schedule outlined in the compliance plan will address identified deficiencies in past operations.

Thus, DOE approval of the Compliance Plan is based, in part, upon its conclusion that

- For the noncompliances identified by the Corporation, the upgrades proposed in the plans of action will, when completed, bring PGDP into compliance with the commitments in the Application.

- The justifications for continued operation presented in this Compliance Plan are considered by DOE to be acceptable.

- The plan of actions and schedule for the identified noncompliances represents an appropriate means of bringing PGDP into compliance with the commitments in the initial Application as rapidly as can be safely and effectively managed. Furthermore, the priority afforded individual upgrade actions is, to the maximum extent practicable, commensurate with the safety or safeguards risk associated with the noncompliance.

This Compliance Plan parallels the structure of the remainder of the Application, with chapters corresponding to the following Application volumes:

- Technical Safety Requirements
- Safety Analysis Report
- Fundamental Nuclear Material Control Plan
- Physical Security Plans
- Emergency Plan
- Quality Assurance Program
- Radioactive Waste Management Program
- Depleted Uranium Management Plan

These volumes of the Application describe aspects of the operations at PGDP as they will be when they are in full compliance with all applicable NRC regulations. In those cases where some aspect of the operation is not currently in full compliance with applicable NRC regulations, the noncompliance is described in this Compliance Plan, as required by 10 CFR 76.35(b)(1). The compliance issues are discussed in the chapters of this plan that correspond to the portion of the application containing the related commitment. Thus, a compliance issue that relates to a commitment made in the Technical Safety Requirements can be found in the Technical Safety Requirements chapter. Where a single compliance issue is related to several commitments in the Application, the compliance issue is discussed only in the chapter corresponding to the first substantive commitment. Thus, a compliance issue that relates to substantive commitments made in the Safety Analysis Report and the Radioactive Waste Management Program is discussed only in the Safety Analysis Report chapter. Each discussion of a compliance issue includes a reference to all of the related Application commitments. As an aid in locating the compliance issues, this document includes a table relating each compliance issue to the CFR requirements with which it fails to comply and with the related sections of the volumes of the Application for Certification.

In compliance with 10 CFR 76.33(e), those portions of the Compliance Plan that contain withholdable information have been placed in the Appendix. Withholdable information includes Restricted Data, National Security Information, Safeguards Information, Unclassified Controlled Nuclear Information, proprietary data, and other such information. Where withholdable information is required to describe a noncompliance, justify continued operation, or present planned actions and schedules that would otherwise be in the body of the Compliance Plan, the compliance issue is discussed in the Appendix. Where withholdable information is required only to identify the commitment which is not met, the compliance issue is presented in the body of the Compliance Plan with a cross-reference to the appropriate material in the Appendix.

The Compliance Plan discussion begins by referencing the regulatory requirement and restating the incompletely met commitment from elsewhere in the Application. The discussion continues with the following:

- description of the specific area(s) of noncompliance [10 CFR 76.35(b)(1)],
- justification for continued operation with adequate safety and safeguards [10 CFR 76.35(b)(3)], and
- planned actions and schedules for achieving compliance [10 CFR 76.35(b)(2)].

The Compliance Plan contains the information required by 10 CFR 76.35(b) and has been prepared and approved by DOE, as indicated by the signatures on the approvals page.

I. Technical Safety Requirements Noncompliances

Scope of Technical Safety Requirements*

REQUIREMENTS

10 CFR 76.35(a)—"(a) A safety analysis report which must include the following information: . . . (6) A description of equipment and facilities which will be used by the Corporation to protect health and minimize danger to life or property (such as handling devices . . .); (7) A description of the management controls and oversight program to ensure that activities directly relevant to nuclear safety and safeguards and security are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety and protection of the national security interests; and . . ."

10 CFR 76.87(a)—"(a) The Corporation shall establish technical safety requirements. In establishing the requirements, the Corporation shall consider the analyses and results of the safety analysis report submitted pursuant to § 76.35."

10 CFR 76.87(c)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements; (1) Effects of natural phenomena; (2) Building and process ventilation and offgas; (3) Criticality prevention; (4) Fire Protection; (5) Radiation protection; (6) Radioactive waste management; (7) Maintenance; (8) Environmental protection; (9) Packaging and transportation of nuclear materials; (10) Accident analysis; (11) Chemical safety; (12) Sharing of facilities, structures, systems and components; (13) Utilities essential to radiological safety; and (14) Operations."

COMMITMENT AS STATED IN THE APPLICATION

No commitments are applicable to this noncompliance issue.

DESCRIPTION OF NONCOMPLIANCE

The proposed Technical Safety Requirements (TSRs) do not explicitly include consideration of the results of the safety analysis relating to the on-site consequences of postulated accidents as required by 10 CFR 76.87(a). The proposed TSRs also fail to include references in the 14 safety topics, required to be addressed by 10 CFR 76.87(c), to (1) the procedures to ensure that activities are conducted in an appropriately controlled manner that ensures protection of employee health and safety, as required by 10 CFR 76.35(a)(7), and (2) the equipment used to protect health and minimize danger to life, as required by 10 CFR 76.35(a)(6).

*This issue was identified by DOE.

JUSTIFICATION FOR CONTINUED OPERATION

The facility will continue to be operated under the requirements of the DOE-approved Operational Safety Requirements (OSRs) until TSRs are approved by NRC and the individual TSRs have been implemented through an orderly transition.

PLAN OF ACTION AND SCHEDULE

The proposed TSRs will be modified to explicitly include both consideration of the on-site consequence of the postulated accidents analyzed in the safety analysis report, as required by 10 CFR 76.87(a), and appropriate references in the 14 safety topics, required to be addressed by 10 CFR 76.87(c). The references must include (1) the procedures to ensure that activities are conducted in an appropriately controlled manner that ensures protection of employee health and safety, as required by 10 CFR 76.35(a)(7), and (2) the equipment used to protect health and minimize danger to life, as required by 10 CFR 76.35(a)(6). This will be accomplished by reviewing/developing accident analyses for the safety analysis report to determine on-site consequences, identifying the assumptions concerning the equipment and operations relied upon to ensure that the on-site consequences are maintained at acceptable levels, and incorporating these assumptions into the TSRs. In addition, the Safety Analysis Report descriptions of procedures and equipment will be reviewed to identify those procedures and equipment relied upon to protect employee health and safety. References to these procedures and equipment will be incorporated into the TSRs for the applicable operations or facilities. If there are no TSRs proposed for the procedures and equipment relied upon to protect employee health and safety, additional TSRs will be developed for the applicable operation or facility. These modifications to the proposed TSRs will be completed by October 24, 1995.

Transition to Technical Safety Requirements

REQUIREMENTS

10 CFR 76.51—"The Corporation shall comply with the certificate of compliance, any approved compliance plan, and the requirements set forth and referenced in this part, except as may be modified by the certificate or approved compliance plan."

10 CFR 76.87(a)—"(a) The Corporation shall establish technical safety requirements."

10 CFR 76.87(d)—"(d) Technical safety requirements must include items in the following categories: (1) Safety limits. (i) If any safety limit is exceeded, corrective action must be taken as stated in the response procedures associated with the technical safety requirements or the affected part of the process must be shut down unless this action would increase the risk to the health and safety of the public or plant personnel. . . . (3) Limiting conditions for operation. When a limiting condition for operation of any process step in the system is not met, the Corporation shall shut down that part of the operation or follow any remedial action permitted by the technical safety requirements until the condition can be met."

COMMITMENTS AS STATED IN THE APPLICATION

Technical Safety Requirements

1.0 Use and Application
1.1 Introduction [Rev. A2, 3/31/95]

"These Technical Safety Requirements (TSRs) are intended to fulfill the requirements of 76.87 and set forth approved limitations for operation of the Paducah Gaseous Diffusion Plant. The TSRs define the conditions, safe boundaries and the management or administrative controls necessary to ensure safe operation of the facility and are based on the accidents analyzed in Section 4.4.2 of the SAR."

3.0 Administrative Controls
3.7 Conditions Outside TSR [Rev. A2, 3/31/95]

"Also, operations personnel may take actions that depart from a requirement in the TSR provided that: (a) an emergency situation exists; (b) these actions are needed immediately to protect the public and employee health and safety; and (c) no action consistent with the TSR can provide adequate or equivalent protection. Such actions must be approved by the incident commander."

Safety Analysis Report

6.0 Organization and Operating Programs
6.1 Organizational Responsibility and Authority, Education and Experience Requirements

6.1.3 Paducah Gaseous Diffusion Plant
6.1.3.1 Plant Manager [Rev. 1, 10/31/94]

"The Plant Manager has direct responsibility for operation of the facility in a safe, reliable, and efficient manner. He has authority commensurate with that responsibility. As manager of the plant, he is responsible to ensure . . . (3) that operation of the GDP facility is conducted in compliance with the specifications, codes, standards, and regulations to which USEC is committed. . . ."

DESCRIPTION OF NONCOMPLIANCE

USEC committed, under Article IV of Exhibit D to the Lease Agreement between DOE and USEC, to follow the DOE Regulatory Oversight Agreement (ROA) requirements until the date that the NRC Office of Nuclear Material Safety and Safeguards (NMSS) Director makes a decision on the initial certification of compliance. Thus, during the period between the date that USEC submits the application for certification to NRC and the NMSS Director's decision, USEC will comply with the ROA. Where the requirements of the ROA differ from the commitments made in the USEC application for NRC certification, the USEC application commitments will not be met during this period. For example, ROA requirement 3.3.2.1 mandates that "operating bounds for safety systems and components as established by OSRs [Operational Safety Requirements] shall be observed." These DOE-approved OSRs, although established for the same purpose, differ from the TSRs to be required by NRC and differ from the TSRs proposed in the PGDP application for certification. The transition from compliance with DOE-approved OSRs to NRC-approved TSRs at PGDP cannot be completed prior to the date of the NMSS Director's decision on the initial certification of compliance. In addition, modifications of the C-360, C-333A, and C-337A facilities are required to ensure the validity of certain assumptions made in Process Safety Operations Analyses used in the development of the accident assessments contained in Chapter 4 of the Safety Analysis Report.

JUSTIFICATION FOR CONTINUED OPERATION

Analysis has shown that the differences between the ROA and 10 CFR 76 are largely administrative and have no significant effect on nuclear safety, safeguards, and security.

Like the TSRs to be required by NRC, the DOE-approved OSRs are "those requirements which define the conditions, safe boundaries, and bases thereof, and management or administrative controls required to assure the safe operation of a nuclear facility." [DOE Order 5480.5, "Safety of Nuclear Facilities."] The OSRs incorporate the experience gained from 40 years of safe operation at PGDP. Compliance with the OSRs until PGDP can effectively implement the TSRs as approved by NRC will provide an adequate basis for ensuring that PGDP can be operated safely during the transition period.

PLAN OF ACTION AND SCHEDULE

After USEC submits the PGDP application for certification to NRC, DOE will begin to modify the ROA requirements to eliminate, in an orderly manner and consistent with the maintenance of adequate safety and safeguards, the administrative inconsistencies resulting from differences between the application commitments and the ROA requirements. The transition from compliance with the ROA to compliance with the commitments in the PGDP application for certification and the DOE compliance plan for PGDP will, except for the transition from DOE-approved OSRs to TSRs, be completed by the date of the NMSS Director's decision on the initial certification of compliance. The transition from compliance with the DOE-approved OSRs to the TSRs proposed in the application for certification cannot be completed until NRC approves the TSRs. Once NRC has approved the TSRs, USEC will implement the requisite policies and procedures and complete the requisite training for compliance with TSRs as rapidly as is consistent with a safe, orderly transition. Modifications to the C-360, C-333A, and C-337A facilities are required to ensure that the analyses of Chapter 4 of the Safety Analysis Report are valid. The transition from the DOE-approved OSRs to the NRC-approved TSRs and these facility modifications will be completed prior to 120 days after the date of the NMSS Director's decision on the initial certification of compliance.

Surveillance Program

REQUIREMENT

10 CFR 76.87—"(a) The Corporation shall establish technical safety requirements. In establishing the requirements, the Corporation shall consider the analyses and results of the safety analysis report submitted pursuant to § 76.35. . . . (d) Technical safety requirements must include items in the following categories: . . . . (5) Surveillance requirement."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Technical Safety Requirements

1.0 Use and Application

1.6 General Application

1.6.3 Surveillance Requirements [Rev. A2, 3/31/95]

1.6.3.1 "Surveillance requirements shall be met prior to entering the operational modes or other conditions specified for individual LCS and LCOs unless otherwise stated in an individual surveillance requirement.

1.6.3.2 Each surveillance requirement shall be performed in accordance with Section 2 and within the maximum specified time interval specified in Section 1.3. Surveillances do not have to be performed on out of service equipment.

1.6.3.3 Failure to perform a surveillance requirement within the maximum acceptable time interval constitutes a failure to meet the operability requirements for a limiting conditions for operation. Exceptions are stated in the individual requirements.

When it is discovered that a surveillance has not been performed within the maximum acceptable time interval for the frequency specified in Section 2, perform the following within 24 hours of discovery:

a. perform the required surveillance, or
b. place the equipment in an operating mode for which the system is not required.

In instances where inoperability is declared due to missed surveillances, this general usage action statement takes preference over the facility-specific LCO action statement.

1.6.3.4 Entry into an operational mode or other specified condition shall not be made unless the surveillance requirements(s) associated with the limiting conditions for operation has been performed within the stated surveillance interval or as otherwise specified in the individual surveillance requirements. This provision shall not

prevent passage through operational modes as required or allowed by action statements Exceptions are stated in the individual requirements.

1.6.3.5 A TSR violation exists when the SRs are not met within the maximum surveillance interval."

Source: Quality Assurance Program
2.19 Quality Program for Class II SSCs [Rev. A0, 1/20/95]

"Class II items and activities are not subject to the full scope of the QAP described in Sections 2.3 through 2.18 above. As described below, Class II SSCs are subject to controls commensurate with those used in the past which have provided adequate levels of quality. . . .

2. Personnel are indoctrinated and trained in the operation and maintenance of Class II systems to ensure satisfactory levels of performance are maintained. The training is documented.

3. Procedures are established for activities associated with or affecting Class II items. The appropriate criteria for determining satisfactory performance are included in these procedures. . . .

8. Inspections are performed to support reliability and safety objectives. Inspection results are documented.

9. Functional verification testing of requirements for active Class II components are established from the Safety Analysis Report. The functional verification tests are performed as scheduled and following repairs are documented to assure the proper performance of the item.

10. Appropriate M&TE is required for use on Class II components to maintain performance within accepted limits."

The commitments in the above-referenced section require that surveillances, calibrations, and inspections be performed for the facility-specific Class I and Class II systems identified in the application for NRC certification.

DESCRIPTION OF NONCOMPLIANCE

Some of the elements of a surveillance program (i.e., surveillance and calibration) that are required to control Class I and Class II structures, systems, and components have not been fully developed and incorporated in PGDP's procedures and training to meet the programmatic requirements of 10 CFR 76 and the commitments in the application for NRC certification.

JUSTIFICATION FOR CONTINUED OPERATION

The performance objectives stated in the Regulatory Oversight Agreement (ROA) are met by the operations and maintenance organizations through a series of plant-specific program description documents that are based upon the guidelines presented in the ROA. These documents include descriptions and guidelines for conducting surveillance, calibration, and maintaining measuring and test equipment. The operations and maintenance program documents often require the preparation of implementing procedures for specific surveillance and calibration activities at the plant.

The site-specific program descriptions and procedures are derived from the ROA and provide adequate plant-wide surveillance and calibration programs that also address the special requirements for Class I and Class II systems. Equipment or system supplier recommendations related to surveillance testing and calibrations are also incorporated where appropriate.

The existing surveillance program and implementing procedures for the surveillances and calibrations are currently controlled by the operations and maintenance organizations and associated line organizations that ensure compliance with the functional ROA requirements. Current procedures and training are being upgraded, and/or additional procedures and training are being developed to include more rigor and detail. Since the existing surveillance program has demonstrated the capability to adequately maintain and operate the plant safely, continuation of the surveillance and calibration program while developing and upgrading the procedures and training will not compromise public health and safety.

PLAN OF ACTION AND SCHEDULE

The surveillance and calibration program for Class I and Class II structures, systems, and components will be upgraded with the following actions:

1. Upgrade surveillance procedures for Class I and Class II structures, systems, and components (SSCs) to the degree necessary to ensure these SSCs will function as assumed in the Safety Analysis Report. The scheduled completion date for this plan of action is October 24, 1995, for Class I surveillance procedures and December 31, 1996, for Class II surveillance procedures.

2. Upgrade the calibration procedures for Class I and Class II SSCs to the degree necessary to ensure they will function as assumed in the Safety Analysis Report. The scheduled completion date for this plan of action is October 24, 1995, for Class I calibration procedures and December 31, 1996, for Class II calibration procedures.

3. Develop and provide training on the revised Class I and Class II surveillance and calibration procedures. The scheduled completion date for this plan of action is October 24, 1995, for Class I training and December 31, 1996, for Class II training.

The procedure upgrades and associated training to address this area of noncompliance will be completed in coordination with the plans and schedules set forth in the compliance plan items that are entitled "Procedures Program" and "Systems Approach to Training." The scheduled completion date for this plan of action is December 31, 1996.

Operations Program

REQUIREMENTS

10 CFR 76.35(a)(4)—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report which must include the following information: . . . (4) An assessment of accidents based on the requirements of § 76.85 . . ."

10 CFR 76.85—"The Corporation shall perform an analysis of potential accidents and consequences to establish the basis for limiting conditions for operation of the plant with respect to the potential for releases of radioactive material. Special attention must be directed to assurance that plant operation will be conducted in a manner to prevent or to mitigate the consequences from a reasonable spectrum of postulated accidents. . . . Plant operating history relevant to the assessment should be included. In performing this assessment, the full range of operations should be considered including, but not necessarily limited to, operation at the maximum capacity contemplated. The assessment must be performed using an expected release rate resulting from anticipated operational occurrences and accidents with existing systems and procedures intended to mitigate the release consequences, along with site characteristics, including meteorology, to evaluate the offsite radiological consequences."

10 CFR 76.87(c)(14)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements: . . . . (14) Operations."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report
3. Facility and Process Description [Rev. A1, 3/8/95]

(In General—Procedural activities exist throughout this chapter.)

Source: Safety Analysis Report
4. Assessment of Accidents
4.3 Hazard Analysis
4.3.2 Hazard Analysis Results
4.3.2.2 Hazard Evaluation [Rev. A4, 3/31/95]

"Based on the hazards, process parameters of concern, and plant operational history, the plant design and operations were reviewed to determine the potential event scenarios that could result in consequences of interest as described in Section 4.3.1.2. The analysis was performed by individual facility to establish operating modes and limiting events for each consequence of interest. The results of this analysis indicate that there are three basic types of events that could produce consequences of interest. These three types of event categories are: releases of UF_6 to the atmosphere, criticality, and releases of other uranium compounds to the atmosphere. . . . Plant operations were subdivided into four areas to develop the

spectrum of events that could result in a release of UF_6 to the atmosphere. These four areas are: autoclave-related operations, UF_6 withdrawal operations, cascade operations, and miscellaneous operations (e.g., chemical operations and technical services). . . . Plant operations are conducted in accordance with limits and conditions of approval imposed by the Nuclear Criticality Safety Program (Section 5.2). This program will prevent criticality events. . . . Various support operations within the gaseous diffusion plant processes involve the handling of uranium compounds on a regular basis (e.g., chemical operations, decontamination)."

4.4 Accident Analysis
4.4.1 Methodology [Rev. A4, 3/31/95]

"Development of the scenario for each postulated accident consisted of the following. Conservative assumptions were made regarding initial plant operating modes. . . . An accident scenario was then developed describing the responses of the plant and personnel leading to termination of the event. . . . The scenario includes . . . controls or personnel action used to respond to the event and amount of time needed for the response. . . . In developing this scenario, it was assumed that . . . plant personnel perform in accordance with plant procedures. . . . [T]he accident scenarios identify . . . administrative controls that are necessary to prevent or mitigate accidents that could potentially result in significant consequences. . . . Technical Safety Requirements are specified for these structures, systems, and components, and procedures prescribe the actions that must be performed to control or mitigate accidents. . . ."

4.4.2 Accident Analysis Results [Rev. A4, 3/31/95]

(In General--Procedural activities exist throughout this section governing normal operations and emergency operations.)

Source: Safety Analysis Report
5. Safety Programs
5.2 Nuclear Criticality Safety
5.2.2 Program Elements
5.2.2.1 Nuclear Criticality Safety Responsibilities [Rev. A1, 3/29/95]

"The fissile material operators are responsible for conducting operations in a safe manner in compliance with operating procedures and may stop operations for safety reasons."

5.2.2.2 Process Evaluation and Approval [Rev. A1, 3/29/95]

"Each operation involving uranium enriched to 1 wt % or higher ^{235}U and 15 grams or more of ^{235}U is evaluated for NCS prior to initiation. . . . Requirements for inclusion of instructions in operating procedures and postings may be identified."

5.2.2.5 Procedure Requirements [Rev. A1, 3/29/95]

"Operating procedures contain appropriate controls for processing, storing, and handling of fissile material. Any requirements specifically identified in applicable NCSAs are incorporated."

Source: Safety Analysis Report
6. Organization and Operating Programs
6.3 Training
6.3.1 General Employee Training
6.3.1.3 General Topics [Rev. A1, 3/31/95]

"General Topics include a general overview of: . . . (3) use of procedures and conduct of operations."

6.3.2 Process Operations and Maintenance Technical Training [Rev. A1, 3/31/95]

"Training programs are established, implemented, and maintained for workers relied upon to operate . . . Class I and Class II structures, systems, and components. . . . The systems approach to training methodology is used for the following job categories: Cascade Operators, Chemical Operators, . . . Plant Shift Superintendents. This technical training applies only to those tasks performed by the above individuals which involve the operation . . . of Class I and II structures, systems and components."

6.4 Operating Procedures
6.4.1 Scope [Rev. A1, 3/31/95]

"USEC utilizes approved and controlled written procedures applicable to activities directly relevant to nuclear safety, safeguards and security. Areas where such procedures may be required include: . . . Operations."

Source: Technical Safety Requirements for Paducah Gaseous Diffusion Plant
Section 3.0 Administrative Controls
3.4 Training [Rev. A2, 3/31/95]

"Facility operators and supervisors are trained and retrained in their area of responsibility. Performance-based training classes and on-the-job training are performed to satisfy this requirement. Operators shall not perform job junctions for which they have not successfully completed the applicable training requirements."

3.6 Procedures and Safety Topics
3.6.1 Procedures [Rev. A2, 3/31/95]

"Written standard operating and emergency response procedures are established and maintained to implement the safety topics discussed in section 3.6.2 and to ensure the accident analysis assumptions remain valid."

3.6.2 Safety Topics [Rev. A2, 3/31/95]

"Programs are established to protect the public health and safety from radiological and toxicological hazards. The following provides references to or describes the procedures and/or equipment for the corresponding safety topic. . . . (n) Operations. The conduct of operations procedure defines the requirements pertaining to the conduct and control of plant activities."

Source: Quality Assurance Program
2. Requirements
2.2 Quality Assurance Program
2.2.3 Program Implementation [Rev. A0, 1/20/95]

"This QAP is implemented through policies, procedures, instructions, specifications, drawings, procurement documents, contractual documents, and other documents. Provisions are established to ensure that these documents are consistent with this QAP, the Safety Analysis Report, the Technical Safety Requirement document, and regulatory requirements. These documents also provide measures which ensure that activities within the scope of the QAP are planned and accomplished under suitably controlled conditions as necessary to accomplish the goals and objectives of this QAP. . . . To the extent that such activities are not being performed at the Paducah plant, the described procedures or other controls may not yet be in place. However, as described in this QAP, such activities will not be conducted until the relevant QAP required procedures or controls are in place."

2.5 Instructions, Procedures, and Drawings
2.5.1 General [Rev. A0, 1/20/95]

"The requirements for instructions, procedures, and drawings are applied to Class I items, and related activities and services within the scope of this QAP as described in Section 2.2, are based on ASME NQA-1-1989, Basic Requirement 5, and this section. Measures are in place to ensure that activities affecting quality are prescribed by documented procedures, drawings, and instructions, as appropriate, and are accomplished in accordance with these documents. These documents also include quantitative and qualitative acceptance criteria to ensure that important operations have been satisfactorily accomplished."

2.19 Quality Program for Class II SSCs [Rev. A0, 1/20/95]

"Class II items and activities are not subject to the full scope of the QAP described in Sections 2.3 through 2.18 above. As described below, Class II SSCs are subject to controls commensurate with those used in the past which have provided adequate levels of quality. . . . 3. Procedures are established for activities associated with or affecting Class II items. The appropriate criteria for determining satisfactory performance are included in these procedures."

DESCRIPTION OF NONCOMPLIANCE

Development of an improved operations program, including development and implementation of administrative procedures, normal operating procedures, abnormal and emergency operating procedures, and safety system test procedures has not been completed. These procedures are required to include the assumptions, administrative controls, and technical requirements described in the accident analysis and Technical Safety Requirements (TSRs) in order to comply with the requirements in 10 CFR 76.87(c)(14). Consequently, the appropriate personnel have not been trained in these new requirements.

JUSTIFICATION FOR CONTINUED OPERATION

The current operations program, including administrative procedures, normal operating procedures, abnormal and emergency operating procedures, and safety system test procedures implements Regulatory Oversight Agreement (ROA) requirements 3.3.2.1, 3.3.2.2, 3.3.2.3, 3.3.2.5, and 3.6.2.5. This program provides the necessary controls for ensuring that plant operations are performed with the controls of the hazard analysis and safety reviews, including controls for (1) observing the operating bounds for safety systems and components as established by operational safety requirements; (2) conducting safety system surveillances as required by the operational safety requirements; (3) conducting additional tests to verify proper operation of systems and integrity of confinement structures after significant maintenance as specified in post-maintenance testing procedures; (4) conducting initial and periodic tests of safety-related equipment to ensure that this equipment operates and meets design objectives; (5) conducting turnovers for selected shift stations to ensure the effective and accurate transfer of information between shift personnel; and (6) performing safety-related work involving nuclear safety, safeguards, and security-related systems, structures, components, and related operations.

Where current procedures do not provide the degree of rigor expected, adequate safety for routine activities is currently assured through on-the-job training of the less-experienced operations personnel and through the "skill of the craft" of experienced operations personnel. For nonroutine activities, these measures are supplemented, as appropriate, with pre-job briefings addressing any deficiencies in the current procedures. The operations procedures for Class I structures, systems, and components (SSCs) will be prepared, approved, issued, and implemented before the certificate of compliance is issued, with the exception of those operations procedures based on the TSRs, which will be completed within 120 days after the certificate of compliance is issued as discussed in the compliance plan item entitled "Transition to Technical Safety Requirements." Since the existing operations program has demonstrated the capability to safely operate the plant, continuation of the existing operations program will not compromise nuclear safety, safeguards, and security while developing and upgrading the procedures and training.

PLAN OF ACTION AND SCHEDULE

The actions planned to implement the operations program to achieve compliance with the 10 CFR 76 requirements include the following:

1. Development/revision of the following types of operations program procedures:

    a. normal operating procedures;
    b. abnormal and emergency operating procedures, including alarm response procedures;
    c. surveillance test procedures; and
    d. administrative procedures providing the additional administrative controls described in the accident analysis and TSRs.

2. Lesson plan development and approval for training appropriate personnel on these procedure upgrades prior to their use of the procedure implementation.

The scheduled completion dates for this plan of action are October 24, 1995, for Class I SSC procedures not involving the TSRs; 120 days after the certificate of compliance is issued for Class I SSC procedures involving the Technical Safety Requirements; and December 31, 1996, for Class II SSC procedures.

The procedure upgrades and associated training required to address this area of noncompliance will be completed consistent with the plan of action and schedule of the compliance plan item entitled "Procedures Program." The scheduled completion date for the overall procedure upgrades and associated training is December 31, 1996.

Maintenance Program

REQUIREMENT

10 CFR 76.87—"(a) The Corporation shall establish technical safety requirements. In establishing the requirements, the Corporation shall consider the analyses and results of the safety analysis report submitted pursuant to § 76.35. . . . (c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements: . . . . (7) Maintenance . . . (d) Technical safety requirements must include items in the following categories: . . . . (6) Administrative controls."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Technical Safety Requirements
3. Administrative Controls
3.6 Procedures and Safety Topics
3.6.2 Safety Topics [Rev. A2, 3/31/95]

"g. Maintenance

Structures, systems or components are maintained (corrective and preventive maintenance) in accordance with written procedures, job package instructions, or performed as skill of the craft as appropriate. A combination of inspections and post maintenance testing is performed to ensure structures, systems and components perform as intended. Deviations from specified standards, materials, components, or other requirements are reviewed and approved."

Source: Quality Assurance Program
2.19 Quality Program for Class II SSCs [Rev. A0, 1/20/95]

"Class II items and activities are not subject to the full scope of the QAP described in Sections 2.3 through 2.18 above. As described below, Class II SSCs are subject to controls commensurate with those used in the past which have provided adequate levels of quality. . . .

2. Personnel are indoctrinated and trained in the operation and maintenance of Class II systems to ensure satisfactory levels of performance are maintained. The training is documented.

3. Procedures are established for activities associated with or affecting Class II items. The appropriate criteria for determining satisfactory performance are included in these procedures. . . .

8. Inspections are performed to support reliability and safety objectives. Inspection results are documented."

DESCRIPTION OF NONCOMPLIANCE

Some of the elements of the maintenance program that are required to control Class I and Class II structures, systems, and components have not been fully developed and incorporated into PGDP's programs, procedures, and training to meet the programmatic requirements of 10 CFR 76 and the commitments in the application for NRC certification.

JUSTIFICATION FOR CONTINUED OPERATION

The performance objectives stated in the Regulatory Oversight Agreement (ROA) are met by the maintenance organization through a series of plant-specific program description documents based upon the guidelines presented in the ROA. These documents include descriptions and guidelines for the corrective maintenance program, preventive maintenance program, calibration program, maintenance work control program, and measuring and test equipment program. The maintenance program documents often require the preparation of implementing procedural documents for the performance of specific maintenance activities at the plant.

The site-specific program descriptions and implementing procedures are derived from the ROA and provide the basis for an adequate, plant-wide maintenance program that also addresses the special requirements for Class I and Class II systems. Equipment or system supplier recommendations related to maintenance are also incorporated in the implementing procedures where appropriate.

The existing maintenance program and implementing procedures for preventive maintenance, corrective maintenance, and work control activities are currently controlled by the maintenance organization and line organizations to ensure that ROA functional requirements are met. Current procedures and training are being upgraded, and/or additional procedures and training are being developed to include more rigor and detail. Since the existing maintenance program has demonstrated the capability to adequately maintain the plant, continuation of the maintenance program while developing and upgrading the procedures and training will not compromise public health and safety.

PLAN OF ACTION AND SCHEDULE

The maintenance program for Class I and Class II systems, structures, and components will be upgraded with the following actions:

1. Upgrade and implement Class I and Class II system work control procedures to the degree necessary to ensure that the work is adequately performed. The scheduled completion date for the Class I work control procedures is October 24, 1995, and for the Class II work control procedures is December 31, 1996.

2. Provide training on the revised work control procedures.

3. Evaluate and upgrade the corrective and preventive maintenance procedures for Class I and Class II SSCs to the degree necessary to ensure these SSCs will function as assumed in the Safety Analysis Report and to ensure they are consistent with plant design and

configuration management. The scheduled completion date for Class I corrective and preventive maintenance procedures is October 24, 1995, and for Class II corrective and preventive maintenance procedures is December 31, 1996.

4. Provide training on the revised corrective and preventive maintenance procedures for Class I and Class II SSCs.

The procedure upgrades and associated training to address this area of noncompliance will be completed in coordination with the plans and schedules set forth in the compliance plan items entitled "Procedures Program" and "Systems Approach to Training." The scheduled completion date for this plan of action is December 31, 1996.

II. Safety Analysis Report Noncompliances

Update the Application Safety Analysis Report*

REQUIREMENTS

10 CFR 76.35(a)(4)—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report must include the following information: . . . . (4) An assessment of accidents based on the requirements of § 76.85 . . ."

10 CFR 76.85—"The Corporation shall perform an analysis of potential accidents and consequences to establish the basis for limiting conditions for operation of the plant with respect to the potential for releases of radiological material. Special attention must be directed to assurance that plant operation will be conducted in a manner to prevent or to mitigate the consequences from a reasonable spectrum of postulated accidents which include internal and external events and natural phenomena in order to ensure adequate protection of the public health and safety. Plant operating history relevant to the assessment should be included. In performing this assessment, the full range of operations should be considered including, but not necessarily limited to, operation at the maximum capacity contemplated. The assessment must be performed using an expected release rate resulting from anticipated operational occurrences and accidents with existing systems and procedures intended to mitigate the release consequences, along with site characteristics, including meteorology, to evaluate the off-site radiological consequences."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report

1. Introduction and General Description of the Facility

1.1 Introduction [Rev. A1, 3/21/95]

"10 CFR 76.35(a) requires that USEC submit, as part of its application for a certificate of compliance, a Safety Analysis Report (SAR) containing the information specified within that section. This SAR contains the information required by section 76.35(a)."

1.4 Purpose of Operation and Operating Parameters [Rev. A1, 3/21/95]

"PGDP enriches uranium using the gaseous diffusion process. A description of this process is found in Chapter 3 of this SAR."

2. Site Characteristics of the Paducah Gaseous Diffusion Plant (PGDP) [Rev. A2, 3/30/95]

"This chapter provides information on the location of the PGDP facility and site characteristics as specified in 10 CFR 76.35(a)(8). The purpose is to provide a description of site characteristics needed to support the assumptions used in determining the impacts of

*This issue was identified by DOE.

normal operation, emergency planning, and the hazard and accident analysis contained in Chapter 4 regarding (1) the contribution of external and natural phenomena to initiation of events, and (2) the site-related assumptions used in evaluating accident consequences. This chapter includes descriptions of:

- the location of the site and facility and its proximity to public and other facilities (Section 2.1),
- local population location and density (Section 2.1),
- sources of external man-made event contributors such as nearby airports, railroads, and utilities (Section 2.2), and
- the historical basis for site characteristics in meteorology, hydrology, geology, and seismology (Sections 2.3 through 2.6)."

4. Assessment of Accidents
   4.1 Introduction [Rev. A4, 3/31/95]

"10 CFR 76.85 requires an analysis of potential accidents and their consequences to establish the basis for limiting conditions for operation in the technical safety requirements. In performing this analysis, special attention must be given to prevention and mitigation of a 'reasonable spectrum of postulated accidents' to ensure adequate protection of the public health and safety against off-site radiological material releases. The purpose of this chapter is to provide the analysis required by Section 76.85."

DESCRIPTION OF NONCOMPLIANCE

The Safety Analysis Report (SAR) submitted with the application for the initial certificate of compliance is based, in part, on the 1985 FSAR and does not fully incorporate the information being generated about accident phenomena by the ongoing DOE site-wide SAR upgrade efforts. The SAR also does not include quantitative analysis of the consequences from a reasonable spectrum of postulated external event and natural phenomena accidents. This effort may identify other accidents which must be analyzed and may provide more accurate estimates of release rates and off-site consequences needed to meet 10 CFR 76.85 for establishing limiting conditions of plant operations.

JUSTIFICATION FOR CONTINUED OPERATION

The SAR submitted with the application for an initial certificate of compliance is based on the 1985 FSAR, plant operating history, and available information from the ongoing SAR upgrade efforts. The bounding event for off-site consequences has been determined to be the rupture and subsequent release of a liquid UF_6 cylinder. The modeling of this accident incorporates new accident phenomena information, where available, and employed conservative assumptions for other aspects of the application SAR analysis. Any new information resulting from the ongoing site-wide SAR upgrade efforts is not expected to increase the consequence estimates generated by this analysis. All other postulated events, including any new ones identified by the ongoing SAR upgrade efforts, result in off-site

consequences that are less severe than the bounding event. Although the ongoing site-wide SAR upgrade efforts may identify additional measures that can be taken to limit risk to the public health and safety, they are not expected to identify hazards more severe than those considered in the application SAR. Based on this justification there is sufficient confidence that the application SAR provides an acceptable basis for limiting conditions of plant operation and that the plant can continue to operate safely until the application SAR is evaluated and updated to incorporate the final information generated by the ongoing SAR upgrade efforts.

PLAN OF ACTION AND SCHEDULE

The actions proposed to evaluate and update the application SAR are as follows:

1. Modify the current SAR to include quantitative analysis of the consequences from a reasonable spectrum of postulated external event and natural phenomena accidents.

2. Evaluate the site-wide SAR information to identify any events not previously addressed and update the application SAR and the TSR limiting conditions of plant operation accordingly.

3. Address the provisions for protecting the safety of the DOE site co-inhabitants (DOE workers) consistent with the site-wide SAR information.

The schedule for completion of this plan of action is October 31, 1996.

C-360 Crane Upgrades

REQUIREMENTS

10 CFR 76.35(a)(6)—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report which must include the following information: . . . (6) A description of equipment and facilities which will be used by the Corporation to protect health and minimize danger to the life or property . . ."

10 CFR 76.85—"The Corporation shall perform an analysis of potential accidents and consequences to establish the basis for limiting conditions for operation of the plant with respect to the potential for releases of radiological material. Special attention must be directed to assurance that plant operation will be conducted in a manner to prevent or to mitigate the consequences from a reasonable spectrum of postulated accidents which include internal and external events and natural phenomena in order to ensure adequate protection of the public health and safety."

10 CFR 76.87(c)(3)&(5)—"Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements: . . . . (3) Criticality prevention; . . . (5) Radiation protection; . . ."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report

3. Facility and Process Description

3.2 UF_6 Feed, Withdrawal, Sampling, Handling, and Cylinder Storage Facilities and Systems

3.2.4 UF_6 Sampling and Transfer Facility

3.2.4.1 Facility Description [Rev. A1, 3/8/95]

"The Toll Transfer and Sampling Building, C-360, is constructed of structural steel. . . . There are two overhead cranes, normally one inside the building and another crane outside that extends 250 ft beyond the east wall of the building."

3.2.4.8 Equipment Designation [Rev. A1, 3/8/95]

"The following are Class I structures, systems, or components (SSCs) associated with the operation of the C-360 facility described in the preceding sections. . . .

3. Facility cranes and slings design feature . . ."

Source: Safety Analysis Report

3. Facility and Process Description

3.2 UF_6 Feed, Withdrawal, Sampling, Handling, and Cylinder Storage Facilities and Systems

3.2.5 UF_6 Cylinders, Handling, and Storage

3.2.5.4 Cranes and Lifting Fixtures [Rev. A1, 3/8/95]

"The C-360 Toll Transfer and Sampling Facility has two 40-ton-capacity bridge cranes. These cranes are dual trolley cranes and have a 20-ton-capacity rating for each trolley and hoist unit. This arrangement allows flexibility and safety for handling of liquid UF_6 cylinders. The pushbutton pendant control and the radio-operated controls can be switched to allow operation of trolleys and hoists individually or simultaneously. Both cranes are of the outdoor-duty type, having stepless speed control on all motions and eddy-current brakes on the hoists."

DESCRIPTION OF NONCOMPLIANCE

The existing design and control scheme for the dual hoist/trolley systems on the C-360 Toll Transfer and Sampling Facility bridge cranes do not meet the facility crane design features for Class I SSCs.

JUSTIFICATION FOR CONTINUED OPERATION

Procedural controls are in place to reduce the potential for dropping a cylinder or dropping a similar weight load on a cylinder. These controls include the following: (1) no cylinder or comparable weight load shall be moved over a cylinder containing liquid UF_6, except those protected by a closed autoclave, and (2) an approved valve protector shall be securely installed over the valve of any cylinder containing liquid UF_6 prior to movement. During the interim period, the combination of these procedural controls and increased operator visual checks provides confidence that the plant can continue to operate safely until the upgrades described in the Plan of Action and Schedule are completed.

PLAN OF ACTION AND SCHEDULE

Replace/repair the existing dual hoist/trolley systems on the East and West C-360 Toll Transfer and Sampling Facility bridge cranes to meet the facility crane design features for cranes that handle liquid UF_6 cylinders. To allow continued operation of the facility, the east crane will be upgraded first and then the west crane. The scheduled completion dates for this plan of action are March 31, 1996, for the east bridge crane and September 30, 1996, for the west bridge crane.

Nuclear Criticality Safety Approval Documents

REQUIREMENTS

10 CFR 76.35(a)—"The application for an initial certificate of compliance must include the information identified in this section. . . . (a) A safety analysis report which must include the following information: . . . (4) An assessment of accidents based on the requirements of § 76.85; . . . (6) A description of equipment and facilities which will be used by the Corporation to protect health and minimize danger to life or property (such as handling devices, working areas, shields, measuring and monitoring instruments, devices for the treatment and disposal of radioactive effluent and wastes, storage facilities, provisions for protection against natural phenomena, fire protection systems, criticality accident alarm systems, etc.); (7) A description of the management controls and oversight program to ensure that activities directly relevant to nuclear safety and safeguards and security are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety protection of the national security interests . . ."

10 CFR 76.85—"The Corporation shall perform an analysis of potential accidents and consequences to establish the basis for limiting conditions for operation of the plant. . . ."

10 CFR 76.87(c)(3)—(Technical safety requirements) "(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in the technical safety requirements: . . . . (3) Criticality prevention . . ."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report

5. Safety Programs
   5.2 Nuclear Criticality Safety
      5.2.2 Program Elements
         5.2.2.2 Process Evaluation and Approval [Rev. A1, 3/29/95]

"Each operation involving uranium enriched to 1 wt % or higher ^{235}U and 15 grams or more of ^{235}U is evaluated for NCS prior to initiation. The operation and related NCS requirements are documented in Part A and Part B of a Nuclear Criticality Safety Approval (NCSA). The evaluation is documented in a Nuclear Criticality Safety Evaluation (NCSE). The evaluation and approval process is governed by written procedures.

Part A of the NCSA documents the operating organization's request for NCS evaluation and the description of the operation. . . .

Part B of the NCSA is prepared, based on the results of the evaluation, and documents the conditions of approval (NCS requirements) for the operation. . . .

The NCSA/NCSE process provides assurance that operations will remain subcritical under both normal and credible abnormal conditions. Any operations that do not comply with

the double contingency principle are documented in NCSAs and NCSEs along with the basis for acceptance of the potential risk they present.

Emergencies arising from unforeseen circumstances may present the need for immediate action. If NCS expertise or guidance is needed immediately to avert the potential for a criticality accident, direction may be provided verbally or in writing. Such direction may include a stop work order or other appropriate instructions. Preparation of an NCSA or other form of documentation will then follow."

DESCRIPTION OF NONCOMPLIANCE

There are operations at PGDP for which either (1) the NCSEs are incomplete or formal documentation is unavailable or (2) double-contingency evaluation has not been fully documented in an NCSE.

JUSTIFICATION FOR CONTINUED OPERATION

In the past, PGDP has safely operated at assays <2 wt %. Operations previously deemed most important from a criticality safety perspective were reviewed and the results documented in KY-L-673, *Paducah Plant Criticality Approvals*, dated December 21, 1973. A properly documented NCSE/NCSA is required for operations involving assays >2 wt % and any new operations. These approvals, intended for use by the NCS professional staff, have proven to be effective over 40 years of operation; however, the documentation is not consistent with the current expectations for content and format. PGDP can continue to operate safely using the historical nuclear criticality safety requirements documents while the NCS staff upgrades and completes existing NCSEs and NCSAs and documents double-contingency evaluations to meet current requirements.

PLAN OF ACTION AND SCHEDULE

All operations with above 2 wt % ^{235}U and all other new operations that require NCS approval will have properly documented and implemented NCSAs and NCSEs prior to startup. For operations where NCSEs and NCSAs are incomplete or formal documentation is unavailable, USEC will prepare the necessary formal documents and provide information flow-down to operating procedures and work-site postings. The scheduled completion date for this plan of action is December 31, 1995.

Nuclear Criticality Safety Implementation

REQUIREMENTS

10 CFR 76.35—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report which must include the following information: . . . (5) A training program that meets the requirements of § 76.95; (6) A description of equipment and facilities which will be used by the Corporation to protect health and minimize danger to life or property (such as handling devices, working areas, shields, measuring and monitoring instruments, devices for the treatment and disposal of radioactive effluent and wastes, storage facilities, provisions for protection against natural phenomena, fire protection systems, criticality accident alarm systems, etc.); (7) A description of the management controls and oversight program to ensure that activities directly relevant to nuclear safety and safeguards and security are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety and protection of the national security interests . . ."

10 CFR 76.87(c)(3)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in the technical safety requirements. . . . (3) Criticality prevention . . ."

10 CFR 76 (in general)—A number of sections (including those related to safety analysis, TSRs, and emergency planning) have implications for nuclear criticality safety to the extent that they address such issues as safety limits and controls.

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.2 Nuclear Criticality Safety
5.2.2 Program Elements
5.2.2.2 Process Evaluation and Approval [Rev. A1, 3/29/95]

"The conditions delineated in the NCSA are implemented through such tools as training, operating procedures, posting and labels."

5.2.2.6 Posting and Labeling Requirements [Rev. A1, 3/29/95]

"NCS limits and controls for areas, equipment, and containers are typically presented through the use of postings and labels as specified in NCSAs and procedures."

5.2.2.7 Change Control [Rev. A1, 3/29/95]

"Functional and physical characteristics of operations (activities and equipment) controlled for NCS are described in NCSAs and/or NCSEs. Modifications to controlled operations are evaluated and approved prior to implementation."

DESCRIPTION OF NONCOMPLIANCE

There are inconsistencies between the nuclear criticality safety approvals (NCSAs) and the supporting implementation procedures and work-site postings. In addition, as a result of ongoing NCSE reviews, plant modifications may be required to implement the resulting NCSAs.

JUSTIFICATION FOR CONTINUED OPERATION

Existing inconsistencies between the NCSAs, the implementing procedures, and the work-site postings are a legacy from the time when the reviews of procedures and postings were not conducted with the rigor to be required upon certification. These deviations have been and are being corrected whenever they are discovered during operations, maintenance, walk-through, and other inspections.

PGDP is in the process of evaluating all fissile material operations and preparing NCSAs for each operation. Compliance with the NCSAs will be strengthened by management oversight and self-assessment through establishment of an NCS Compliance Assessment Team. The team will prepare a surveillance plan for field walkdowns and assessments of fissile material operations. Then, the team will help ensure that NCS requirements are being properly implemented by documented field verification followed by identification and implementation of corrective actions.

The inconsistencies between NCSAs, procedures, and postings are generally minor. The risks associated with the deviations are extremely low because application of the double-contingency principle requires two independent and concurrent process changes before a criticality accident is possible.

Criticality safety risks at PGDP are relatively small because of the low enrichment and corresponding large mass of uranium required for a critical configuration. The plant's 40-year history of safe operation demonstrates the low risk of nuclear criticality for uranium in the physical and chemical forms and at the enrichments employed in the facility.

PLAN OF ACTION AND SCHEDULE

Procedures are in place to provide for flow-down of requirements from new NCSAs to operating procedures and postings. The Compliance Assessment Team was established in March 1995. Their surveillance plan will be prepared by June 1995. The field verification shall be completed and documented by December 1995.

If NCSEs identify the need for modifications to the existing plant configuration, a justification for continued operation will be developed, and the modifications will be scheduled and tracked to completion as regulatory commitments.

Criticality Accident Alarm System Coverage

REQUIREMENT

10 CFR 76.89—(Criticality [alarm] requirements) "(a) The Corporation must maintain and operate a criticality monitoring and audible alarm system meeting the requirements of paragraph (b) of this section in all areas of the facility. The Corporation may describe for the approval of the Commission defined areas to be excluded from the monitoring requirement. This submittal must describe the measures that will be used to ensure against criticality, including kinds and quantities of material that will be permitted and measures that will be used to control those kinds and quantities of material. (b) The system must detect and annunciate a criticality that produces an absorbed dose in soft tissue of 20 rads of combined neutron and gamma radiation at an unshielded distance of 2 meters from the reacting material within 1 minute. Coverage of all monitored areas must be provided by two detectors."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.2 Nuclear Criticality Safety
5.2.2 Program Elements
5.2.2.4 Criticality Accident Alarm System Coverage [Rev. A1, 3/29/95]

"A Criticality Accident Alarm System (CAAS) is provided to alert personnel if a criticality accident should occur. . . ."

DESCRIPTION OF NONCOMPLIANCE

Buildings C-720 and C-728, where electric motors, pumps, and other equipment are repaired and refurbished, do not have criticality accident alarm system coverage. Some of the equipment in these buildings contains residual amounts of fissile material.

JUSTIFICATION FOR CONTINUED OPERATION

In Building C-728, electric motors are cleaned and refurbished. Until a CAAS is installed, motors containing ≤ 1 wt % ^{235}U will be cleaned in the facility. For motors with >1 wt % ^{235}U, motor cleaning operations will be limited under a specific nuclear criticality safety approval to ensure that not greater than 700 grams of ^{235}U will be allowed to accumulate. With less than 700 grams of ^{235}U or ≤ 1 wt % ^{235}U, a nuclear criticality accident is not possible.

In Building C-720, a variety of maintenance tasks are performed. Repair and refurbishment operations for components containing uranium enriched to >1 wt % ^{235}U have ceased and will not recommence until specific nuclear criticality safety approvals have been

implemented. In some cases components containing uranium enriched to >1 wt % ^{235}U will be relocated to another building that has a CAAS. Additional controls have been implemented for criticality control while components containing >1 wt % ^{235}U remain in the unalarmed area.

PLAN OF ACTION AND SCHEDULE

A criticality accident alarm system will be installed in the area, or all components containing uranium enriched to >1 wt % ^{235}U will be removed from the unalarmed area. The scheduled completion date for this plan of action is December 31, 1995.

Coverage Exemption for Criticality Accident Alarm System

REQUIREMENT

10 CFR 75.89(a)—(Criticality [alarm] requirements) "(a) The Corporation must maintain and operate a criticality monitoring and audible alarm system meeting the requirements of paragraph (b) of this section in all areas of the facility. The Corporation may describe for the approval of the Commission defined areas to be excluded from the monitoring requirement. This submittal must describe the measures that will be used to ensure against criticality including kinds and quantities of material that will be permitted and measures that will be used to control those kinds and quantities of material."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.2 Nuclear Criticality Safety
5.2.2 Program Elements
5.2.2.4 Criticality Accident Alarm System Coverage [Rev. A1, 3/29/95]

"A Criticality Accident Alarm System (CAAS) is provided to alert personnel if a criticality accident should occur."

DESCRIPTION OF NONCOMPLIANCE

A Criticality Accident Alarm System (CAAS) is maintained and operated for some but not all areas of the facility.

JUSTIFICATION FOR CONTINUED OPERATION

The existing Safety Analysis Report and other documents identify plant locations where CAAS monitoring is provided. The report and documents also recognize that the other plant areas do not have CAAS coverage. This approach is consistent with historical DOE requirements which allowed plant areas to be excluded from CAAS coverage based on documented analyses that there was no credible risk of a criticality accident in those areas.

Areas not covered by a CAAS (such as uranium cylinder storage yards and low-level waste storage areas) have minimal risk of a criticality accident based on the intrinsic nature of the configurations and the materials allowed in the areas, the existence of controls to prevent criticality, and operating experience. Many of these areas are not occupied on a regular basis.

PLAN OF ACTION AND SCHEDULE

10 CFR 76.89(a) permits USEC to request NRC approval for specific areas to be excluded from CAAS coverage. Analyses are being developed which provide the technical justification for not providing CAAS coverage in designated areas of the plant. The analyses will be submitted to NRC under separate cover from the application. The analyses will include a verification of the adequacy of the existing CAAS and its detector locations for detecting a criticality accident and justification that detectors are not required for monitoring other areas of the plant. These analyses will be submitted to NRC by September 30, 1995.

Radiation Protection Procedures

REQUIREMENTS

10 CFR 20.1101(a)—"(a) Each licensee shall develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of this part." [Inherent in this requirement is the development and implementation of administrative controls such as procedures to control activities involving radiation protection.]

10 CFR 76.60(d)(2)—"(d) The Corporation shall comply with the applicable provisions of 10 CFR 20, 'Standards for Protection Against Radiation'. . . . (2) The Corporation shall comply with the requirements in this part not later than the date of the Director's decision on the initial certificate of compliance. . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.3 Radiation Protection
5.3.1 Administrative Requirements
5.3.1.4 Radiation Protection Manual [Rev. A1, 3/31/95]

"USEC maintains a *Radiological Protection Manual* which defines the requirements for the implementation, operation, assessment, health physics technician qualification, and oversight of the RP Program. The *Radiological Protection Manual* is reviewed annually. Approved, written procedures are prepared and issued to implement the manual.

Technical work documents, such as procedures, work packages, or job and research plans, are developed to control hands-on work with radioactive materials. Technical work documents used to specify radiological control requirements are reviewed and approved by the Health Physics Organization. Radiological Control Hold Points are incorporated into technical work documents, as appropriate."

DESCRIPTION OF NONCOMPLIANCE

The radiological protection procedures currently in use do not fully implement all of the requirements of 10 CFR 20.

JUSTIFICATION FOR CONTINUED OPERATION

The current procedures in place provide for compliance with the ROA. The current implementation of the DOE requirements provides a level of protection to workers that is comparable with the 10 CFR 20 requirements. The differences between the DOE ROA and 10 CFR 76 are largely administrative and have no significant effect on nuclear safety. Any administrative noncompliances that might result from differences between the DOE ROA and the 10 CFR 76 requirements would not have any significant effect on safety.

PLAN OF ACTION AND SCHEDULE

The required administrative controls will be implemented. The scheduled completion for this plan of action is October 24, 1995.

NVLAP Certification

REQUIREMENTS

10 CFR 20.1501(a)(2)—"(a) Each licensee shall make or cause to be made, surveys that . . . (2) [a]re reasonable under the circumstances to evaluate. . . ."

10 CFR 20.1501(c)—"All personnel dosimeters (except for direct and indirect reading pocket ionization chambers and those dosimeters used to measure the dose to the extremities) that require processing to determine the radiation dose and that are used by licensees to comply with § 20.1201, with other applicable provisions of this chapter, or with conditions specified in a license must be processed and evaluated by a dosimetry processor. . . . (1) Holding current personnel dosimetry accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology; and (2) Approved in this accreditation process for the type of radiation or radiations included in the NVLAP program that most closely approximates the type of radiation or radiations for which the individual wearing the dosimeter is monitored."

10 CFR 76.60(d)—"(d)The Corporation shall comply with the applicable provisions of 10 CFR 20, 'Standards for Protection Against Radiation'. . . . (2) The Corporation shall comply with the requirements in this part not later than the date of the Director's decision on the initial certificate of compliance. . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.3 Radiation Protection
5.3.2 Radiation Protection Program
5.3.2.2 Radiation Exposure [Rev. A1, 3/31/95]

"Persons entering a restricted area are monitored for beta/gamma radiation, either individually or as a group when with a tour. Health Physics specifies other dosimeters such as finger rings and direct-reading dosimeters where the standard TLDs cannot provide the desired information or are not practical. Self-reading or alarming dosimeters are used with industrial radiographic operations or entry into High Radiation or Very High Radiation Areas."

DESCRIPTION OF NONCOMPLIANCE

Personnel dosimeters (except for direct and indirect reading pocket ionization chambers and those dosimeters used to measure the dose to the extremities) that require processing to determine the radiation dose and that are used to comply with 10 CFR 20.1201 are not processed and evaluated by a dosimetry processor holding current personnel dosimetry

accreditation and approval from the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology (NIST).

JUSTIFICATION FOR CONTINUED OPERATION

The current DOE Laboratory Accreditation Program (DOELAP) is equivalent to the National Voluntary Laboratory Accreditation Program (NVLAP) and is therefore comparable to the 10 CFR 20 requirements.

PLAN OF ACTION AND SCHEDULE

USEC will provide by October 24, 1995, NVLAP-accredited dosimetry for those relatively few individuals who are required to be monitored under 10 CFR 20.1502.

Posting of Radioactive and Hazardous Materials

REQUIREMENTS

10 CFR 20.1501(a)(2)(iii)—"(a) Each licensee shall make, or cause to be made, surveys that (2) [a]re reasonable under the circumstances to evaluate (iii) [t]he potential radiological hazards that could be present."

10 CFR 20.1902(a)—"The licensee shall post each radiation area with a conspicuous sign or signs bearing the radiation symbol and the words 'CAUTION, RADIATION AREA.'"

10 CFR 20.1902(b)—"The licensee shall post each high radiation area with a conspicuous sign or signs bearing the radiation symbol and the words 'CAUTION, HIGH RADIATION AREA' or 'DANGER, HIGH RADIATION AREA.'"

10 CFR 20.1902(c)—"The licensee shall post each very high radiation area with a conspicuous sign or signs bearing the radiation symbol and words 'GRAVE DANGER, VERY HIGH RADIATION AREA.'"

10 CFR 20.1902(d)—"The licensee shall post each airborne radioactivity area with a conspicuous sign or signs bearing the radiation symbol and words 'CAUTION, AIRBORNE RADIOACTIVITY AREA' or 'DANGER, AIRBORNE RADIOACTIVITY AREA.'"

10 CFR 20.1902(e)—"The licensee shall post each area or room in which there is used or stored an amount of licensed material exceeding 10 times the quantity of such material specified in Appendix C to §§ 20.1001–20.2401 with a conspicuous sign or signs bearing the radiation symbol and the words 'CAUTION, RADIOACTIVE MATERIAL(S)' or 'DANGER, RADIOACTIVE MATERIAL(S).'"

10 CFR 20.1904(a)—"The licensee shall ensure that each container of licensed material bears a durable, clearly visible label bearing the radiation symbol and the words 'CAUTION, RADIOACTIVE MATERIAL' or 'DANGER, RADIOACTIVE MATERIAL.' The label must also provide sufficient information (such as the radionuclide(s) present, an estimate of the quantity of radioactivity, the date for which the activity is estimated, radiation levels, kinds of materials, and mass enrichment) to permit individuals handling or using the containers, or working in the vicinity of the containers, to take precautions to avoid or minimize exposures."

10 CFR 76.60(d)—"(d) The Corporation shall comply with the applicable provisions of 10 CFR 20, 'Standards for Protection Against Radiation'. . . . (2) The Corporation shall comply with the requirements in this part not later than the date of the Director's decision on the initial certificate of compliance. . . ."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.3 Radiation Protection
Table 5.3-1 Contamination Survey Frequency Basis [Rev. A1, 3/31/95]
5.3.2.5 Radiological Surveys [Rev. A1, 3/31/95]

"The radiological survey program consists of routine surveys, work support surveys, and material release activities. Surveys are conducted to support facility activities in a manner which ensures radiological hazards associated with each activity are properly identified and relative radiation levels and concentrations of radioactive material are determined. Reduced routine survey frequencies are permitted due to the stability of operation as demonstrated by the historical consistency of survey results. Radiological surveys for the purposes of evaluating the need for personnel protection equipment or for posting requirements are performed by qualified health physics personnel."

5.3.3.1 Areas Restricted for Purposes of Radiological Control [Rev. A1, 3/31/95]

"Radiological control is provided through control of access to areas or facilities where radioactive material may be encountered and by requiring that each person who enters those areas or facilities receives the appropriate level of radiological worker training. Depending upon the type and extent (or amount) of radioactive material present, the areas identified include Restricted Areas, Radioactive Materials Areas, Contamination Control Zones, Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiation Areas, or High Radiation Areas. Access and departure requirements are specified by procedure. Radiological posting is used to alert personnel to the presence of radiation and radioactive materials and to aid them in minimizing exposures and preventing the spread of contamination. Where contamination is present, contamination controls are implemented."

DESCRIPTION OF NONCOMPLIANCE

Some areas of the facilities have been completely characterized regarding the type, extent, and amount of radioactive material present. As a consequence, some of the facilities have not been properly posted regarding the type, extent, and amount of radioactive material or hazards present.

At present, a few of the areas listed in Table 5.3-1 (feed withdrawal stations, uranium processing areas, and contaminated maintenance areas) are either not surveyed as frequently as described in Table 5.3-1 or only portions of such areas are surveyed.

JUSTIFICATION FOR CONTINUED OPERATION

The current procedures provide for compliance with the ROA. Implementing the DOE requirements affords protection to workers that is comparable to that required by 10 CFR 20. In cases where specifics are unknown, PGDP over-posts the area to warn of the potential dangers, if not the specific danger, and thus ensures that adequate precautions are taken for

protection against radiation and radioactive material. The ROA requirements for protection of workers in this regard will be met until full compliance is achieved.

PLAN OF ACTION AND SCHEDULE

Necessary radiological characterization activities and re-posting the site to eliminate inconsistencies and to reflect the required "Restricted Area" and "Contamination Control Zone" designations will be implemented by December 31, 1995.

Fire Alarm System Reliability

REQUIREMENT

10 CFR 76.87(c)(4)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in the technical safety requirements: . . . . (4) Fire prevention . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5.4 Fire Protection
5.4.2 Fixed Fire Suppression and Fire Detection Systems [Rev. A1, 4/3/95]

"The plant fire alarm system monitors fire alarms in all important buildings and structures and provides alarm indication to the C-300 CCF and/or C-220 Building (Fire and Guard facility). These alarms include waterflow alarms from the sprinkler systems, manual pull stations located throughout the site, and other special detection systems, such as smoke, heat, and CO_2 discharge. This provides for prompt dispatch of emergency response personnel, as necessary, to investigate and resolve the alarm condition."

DESCRIPTION OF NONCOMPLIANCE

The reliability of the fire alarm system is not commensurate with the level of protection described in the application for certification. If the existing fire alarm system lost contact with an individual sprinkler system alarm or fire alarm box, the contact loss would not immediately be detected. This lack of detection can result in operation with undetected, inoperable fire alarms or other disabled alarms.

JUSTIFICATION FOR CONTINUED OPERATION

Loss of contact with an individual alarm is an infrequent, random occurrence and results in a minimal safety impact. The fire alarm system is currently operable. Actuation of the primary fire protection systems is not affected by this alarm problem, and those systems would operate to protect Class I and Class II structures, systems, and components. Alternate means for emergency notification of the central monitoring location in the event of a fire are available, such as local sprinkler alarm devices, standard telephones, emergency "red handle" phones, and two-way radios. Appropriate compensatory measures can be taken in the event one or more alarm locations do not report to the central system (e.g., an inoperative alarm box would be tagged out, and alarms could be provided by personnel observations and reporting by the communication equipment mentioned above).

PLAN OF ACTION AND SCHEDULE

The Nuclear Safety Upgrade project has been established and provides for an upgrade to the fire alarm system to enhance the overall reliability of the system. The project includes scheduling, equipment procurement, installation, system testing, and personnel training. The scheduled completion for this plan of action is June 30, 1996.

Fire Protection Water Pump Reliability

REQUIREMENT

10 CFR 76.87(c)(4)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in the technical safety requirements: . . . . (4) Fire prevention . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5.4 Fire Protection
5.4.2 Fixed Fire Suppression and Fire Detection Systems [Rev. A1, 4/3/95]

"A reliable water supply system with water storage, pumps, and underground piping is provided. This system also has sectional valves to permit isolation in the event of a pipe break and split pumping capacities to provide greater reliability and redundancy."

DESCRIPTION OF NONCOMPLIANCE

At present the availability of three of the five fire water pumps is necessary to provide the capacity described in the Safety Analysis Report. Because the pumping system is old, it does not provide the level of reliability implied by the Safety Analysis Report commitment.

JUSTIFICATION FOR CONTINUED OPERATION

The existing pumps are in operation and will remain in operation until new or refurbished pumps are installed. Even if two pumps are out of service at any given time, the system water supply will be adequate. The performance and maintenance of the existing pumps will be closely monitored to ensure reliability until the new and refurbished pumps are on line. Monitoring of the fire water pumps will be documented on-site in accordance with the DOE Oak Ridge Operations Office Fire Prevention and Protection Policy, which includes inspection, testing, and maintenance frequencies.

PLAN OF ACTION AND SCHEDULE

The Nuclear Safety Upgrade project has been established and provides for refurbishment or replacement of the diesel-powered fire pump and refurbishment of two of the electric fire water pumps. This project includes scheduling, equipment procurement, installation, and system testing. The scheduled completion date for this plan of action is June 30, 1996.

Fire Protection Equipment

REQUIREMENT

10 CFR 76.87(c)(4)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in the technical safety requirements: . . . . (4) Fire prevention . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5.4 Fire Protection
5.4.3 Mobile and Portable Equipment [Rev. A1, 4/3/95]

"Mobile fire equipment is provided and maintained on-site to support fire-fighting activities and back up the fixed fire suppression systems. This equipment is manned by Fire Services personnel and includes a minimum of one 1000 gpm pumper, one truck with Hazmat, radiological and rescue equipment, and one ambulance. This equipment is housed indoors and equipped with the necessary hose, nozzles, breathing apparatus, meters, detection equipment, rescue equipment, and other related equipment. Hose carts are also provided in the process buildings to facilitate manual fire suppression efforts."

DESCRIPTION OF NONCOMPLIANCE

The process buildings contain insufficient hose and equipment to support manual suppression activities due to the large size of the process buildings. Currently, in the event of a fire, additional hose and equipment must be brought to the process buildings and then to the fire location by the fire department personnel as needed. This task slows initial fire attack and requires additional manpower to put the equipment into operation.

JUSTIFICATION FOR CONTINUED OPERATION

Limited manual fire suppression capability is already provided in the process buildings as a backup for the sprinkler systems. A fire can be controlled by the existing fixed fire protection systems long enough for additional equipment to be brought in and thus to adequately protect life and limit property damage.

PLAN OF ACTION AND SCHEDULE

The manual equipment needs and locations will be identified by the Authority Having Jurisdiction, and a plan will be developed to purchase and install the equipment. The scheduled completion date for this plan of action is December 31, 1995.

Packaging and Transportation

REQUIREMENTS

10 CFR 76.60(g)—"The Nuclear Regulatory Commission will use the following requirements for certification of the Corporation for operation of the gaseous diffusion plants: . . . . (g) The Corporation shall comply with the applicable provisions of 10 CFR Part 71, 'Packaging and Transportation of Radioactive Material.'"

10 CFR 76.87(c)(9)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements: . . . . (9) Packaging and transporting nuclear materials . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.5 Transportation [Rev. A1, 3/22/95]

"10 CFR 76.60(g) applies the requirements of 10 CFR Part 71 to USEC. The packaging and transportation of radioactive materials are conducted in accordance with 10 CFR 71. Full compliance with this part is dependent on the approval and implementation of a quality assurance program that meets the requirements of 10 CFR Part 71 Subpart H. A transportation quality assurance plan has been submitted separately from this application."

DESCRIPTION OF NONCOMPLIANCE

The Radioactive Material Packaging and Transportation Quality Assurance Program is being developed in accordance with 10 CFR 71.12 and Subpart H but will not be fully implemented by October 24, 1995. Full implementation of the program awaits completion of the programmatic upgrades in procedures, training, records management, and configuration management.

JUSTIFICATION FOR CONTINUED OPERATION

Packaging and transportation activities will be performed in accordance with (1) current procedures, (2) existing NRC certificates of compliance of packages, (3) documented packaging inspections, and (4) maintenance of UF_6 cylinders in accordance with ANSI Standard N14.1.

Safe operation of packaging and transportation activities is ensured until the Radioactive Material Packaging and Transportation Quality Assurance Program is fully implemented for the following reasons:

1. The Radioactive Material Packaging and Transportation Quality Assurance Program currently in use is based on DOE Orders and is functionally similar to 10 CFR 71.12 and Subpart H.

2. Radioactive materials have been packaged and transported pursuant to applicable DOE quality assurance requirements as prescribed by Section 3.14.2.5 of the ROA and implemented through plant protocol and procedures as described in Section 3.14.3.5 of the ROA. Continued compliance with these ROA sections will ensure adequate protection for nuclear safety, safeguards, and security.

PLAN OF ACTION AND SCHEDULE

The Packaging and Transportation Quality Assurance Plan required by 10 CFR 71 will be submitted to NRC in July 1995. A plan for developing and implementing the site-specific procedures for this program will be established by October 24, 1995.

Complete implementation of the Quality Assurance Plan for Packaging and Transportation of Radioactive Materials, in accordance with 10 CFR 71, is awaiting completion of upgrades to other PGDP programs. These programs are discussed in the following Compliance Plan issues:

- Records Management and Document Control Programs,
- Configuration Management Program Implementation, and
- Procedures Program.

The scheduled completion date for implementation of this plan of action is December 31, 1996.

Systems Approach to Training

REQUIREMENT

10 CFR 76.95—"A training program must be established, implemented, and maintained for individuals relied upon to operate, maintain, or modify the GDPs in a safe manner."

COMMITMENT AS STATED IN THE APPLICATION

Source: Safety Analysis Report (SAR)
6.3 Training
6.3.2 Process Operations and Maintenance Technical Training [Rev. A1, 3/31/95]

"Training programs are established, implemented, and maintained for all workers relied upon to operate, maintain, or modify class one and class two structures, systems, and components as defined in the SAR. The programs are based on a systems approach to training, providing the level of detail and scope of training to match the need."

DESCRIPTION OF NONCOMPLIANCE

The systems approach to training concept is not fully implemented for all workers relied upon to operate, maintain, or modify Class I and Class II structures, systems, and components. A systems approach to training has been fully developed only for UF_6 autoclave operations, and the elements of a systems approach to training (systematic analyses of jobs, development of training objectives, training design and implementation, evaluation of trainee mastery, and evaluation and revision of training) are in various stages of development for the other job classifications requiring a systems approach to training.

JUSTIFICATION FOR CONTINUED OPERATION

Though a systems approach to training (SAT) has not yet been fully implemented for all of the identified job categories, it will be fully implemented for the UF_6 autoclave operations by October 24, 1995. These operations involve a large percentage of the Class I systems, structures, and components at the plant. Other critical operations are addressed by Technical Safety Requirements (TSRs), and initial training on the TSRs will take place prior to their implementation. The training program required by 10 CFR 76.95 will be fully implemented for appropriate operations prior to certification or within 120 days after the date of the Director's decision on the initial certification of compliance. The UF_6 autoclave operators are qualified by the pre-existing program.

The existing training program has proven to be successful in achieving safe plant operation. This program will continue until it is replaced by an SAT program. Continued operation with the current cadre of experienced personnel and the existing training program will not pose any significant risk to the employees or to the public health and safety.

PLAN OF ACTION AND SCHEDULE

A training program will be developed and implemented that is based upon a systems approach to training for workers who are relied upon to operate, maintain, or modify Class I and Class II structures, systems, and components as defined in the Safety Analysis Report. By December 31, 1996, this effort will have completed (1) a systematic analysis of the jobs of workers required to receive such training, (2) training objectives, (3) training program design and implementation, and (4) initial evaluation and training of personnel as necessary. Evaluation and revision of the training based on job performance will commence prior to December 31, 1996, and will be a continuing component of the training.

Procedures Program

REQUIREMENTS

10 CFR 76.10(c)—"(c) For purposes of paragraph (a)(1) of this section, deliberate misconduct by a person means an intentional act or omission that the person knows: . . . (2) [c]onstitutes a violation of a requirement, procedure, instruction, contract, purchase order or policy of the Corporation, contractor, or subcontractor."

10 CFR 76.35(a)(7)—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report which must include the following information: . . . (7) A description of the management controls and oversight program to ensure that activities directly relevant to nuclear safety and safeguards and security are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety and protection of the national security interests. . . ."

10 CFR 76.35(k)—"The application for an initial certificate of compliance must include the information identified in this section. . . . (k) A plan describing the facility's proposed security procedures and controls as set forth in § 95.15(b) of this chapter for protection of classified matter."

10 CFR 76.60(c)—"(c) The Corporation shall comply with the applicable provisions of 10 CFR part 19, 'Notices, Instructions and Reports To Workers: Inspection and Investigations'. . . ." (NOTE: §§ 19.11 and 19.12 describe procedure requirements.)

10 CFR 76.60(d)—"(d) The Corporation shall comply with the applicable provisions of 10 CFR part 20, 'Standards For Protection Against Radiation'. . . ." (NOTE: §§ 20.1101, 20.1301, 20.1703, 20.1906, 20.2002, and 20.2201 describe procedure requirements.)

10 CFR 76.60(e)—"(e) The Corporation shall comply with the applicable provisions of 10 CFR part 21, 'Reporting of Defects and Noncompliance,' with the following modifications: (1) The Corporation shall comply with the requirements in §§ 21.6 and 21.21 not later than the date of the Director's decision on the initial certificate of compliance and/or an initial plan for achieving compliance." (NOTE: §§ 21.6 and 21.21 describe procedure requirements.)

10 CFR 76.60(f)—"(f) The Corporation shall comply with the applicable provisions of 10 CFR part 26, 'Fitness-for-Duty Programs.' The requirements of this section apply only if the Corporation elects to engage in activities involving formula quantities of strategic special nuclear material. When applicable, the requirements apply only to the Corporation and personnel carrying out the activities specified in § 26.2(a)(1) through (5)." (NOTE: §§ 26.2, 26.20, 26.21, 26.22, 26.24, 26.27, 26.28, 26.29, and 10 CFR 26 Appendix A describe procedure requirements.)

10 CFR 76.60(g)—"(g) The Corporation shall comply with the applicable provisions of 10 CFR part 71, 'Packaging and Transportation of Radioactive Material'." (NOTE: §§ 71.22, 71.24, 71.37, 71.75, 71.87, 71.103, 71.105, 71.107, 71.111, 71.113, 71.119, 71.121, 71.123, 71.131, 71.135, and 71.137 describe procedure requirements.)

10 CFR 76.60(h)—"(h) The Corporation shall comply with the applicable provisions for physical security and material control and accounting as specified in subpart E to this part and contained in 10 CFR part 70, 'Domestic Licensing of Special Nuclear Material,' part 73, 'Physical Protection of Plants and Materials,' and part 74, 'Material Control and Accounting of Special Nuclear Material.'" (NOTE: §§ 70.22, 70.32, 70.51, 73.21, 73.67, 10 CFR 73 Appendix E, and 74.33 describe procedure requirements.)

10 CFR 76.60(i)—"(i) The Corporation shall comply with the applicable provisions of 10 CFR part 95, 'Security Facility Approval and Safeguarding of National Security Information and Restricted Data'. . . ." (NOTE: §§ 95.15, 95.18, 95.33, 95.37, 95.41, 95.49, and 95.59 describe procedure requirements.)

10 CFR 76.68(c)—"(c) The Corporation shall maintain records of changes in the plant and of changes in the programs, plans, policies, procedures and operations described in the approved application, and copies of the safety analyses on which the changes were based. The records of plant changes must be retained until the end of the duration of the lease. The records of changes in programs, plans, policies, procedures, and operations and copies of the safety analysis on which the changes were based must be retained for a period of 2 years."

10 CFR 76.85—"The Corporation shall perform an analysis of potential accidents and consequences to establish the basis for limiting conditions for operation of the plant with respect to the potential for releases of radioactive material. Special attention must be directed to assurance that plant operation will be conducted in a manner to prevent or to mitigate the consequences from a reasonable spectrum of postulated accidents which include internal and external events and natural phenomena in order to ensure adequate protection of the public health and safety. Plant operating history relevant to the assessment should be included. In performing this assessment, the full range of operations should be considered including, but not necessarily limited to, operation at the maximum capacity contemplated. The assessment must be performed using an expected release rate resulting from anticipated operational occurrences and accidents with existing systems and procedures intended to mitigate the release consequences, along with site characteristics, including meteorology, to evaluate the off-site radiological consequences."

10 CFR 76.87(c)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements: (1) Effects of natural phenomena; (2) Building and process ventilation and offgas; (3) Criticality prevention; (4) Fire prevention; (5) Radiation protection; (6) Radioactive waste management; (7) Maintenance; (8) Environmental protection; (9) Packaging and transporting nuclear materials; (10) Accident analysis; (11) Chemical safety; (12) Sharing of facilities, structures, systems and components; (13) Utilities essential to radiological safety; and (14) Operations.

10 CFR 76.87(d)—"(d) Technical safety requirements must include items in the following categories: (1) Safety limits. (I) If any safety limit is exceeded, corrective action must be taken as stated in the response procedures associated with the technical safety requirements or the affected part of the process must be shut down unless this action would increase the risk to the health and safety of the public or plant personnel. . . . (2) Limiting control settings. (i) Where a limiting control setting is specified for a variable on which a safety limit has been placed, the setting must be so chosen that protective action, either automatic or manual, will correct the abnormal situation before a safety limit is exceeded. If, during operation, the

automatic alarm or protective devices do not function as required, appropriate action must be taken to maintain the variables within the limiting control-setting values and to repair promptly the automatic devices or to shut down the affected part of the process. . . . (3) Limiting conditions for operation. When a limiting condition for operation of any process step in the system is not met, the Corporation shall shut down that part of the operation or follow any remedial action permitted by the technical safety requirements until the condition can be met."

10 CFR 76.91(j)—"(j) The Corporation shall establish, maintain, and be prepared to follow a written emergency plan. The emergency plan submitted under § 76.35(d) must include the following information. . . . (j) Training. A brief description of the frequency, performance objectives, and plans for the training that the Corporation will provide workers on how to respond to an emergency including any special instructions, briefings, and orientation tours the Corporation would offer to fire, police, medical, and other emergency personnel. The training must familiarize personnel with site-specific emergency procedures. The training must also prepare site personnel for their responsibilities for the accident scenarios postulated as most probable for the specific site, including the use of team training for these accident scenarios. . . ."

10 CFR 76.91(l)—"(l) Exercises. Provisions for conducting quarterly communications checks with off-site response organizations and biennial on-site exercises to test response to simulated emergencies. Quarterly communications checks with off-site response organizations must include the check and update of all necessary telephone numbers. The Corporation shall invite off-site response organizations to participate in the biennial exercises. Participation of off-site response organizations in biennial exercises, although recommended, is not required. Exercises must use accident scenarios postulated as most probable for the specific site and the accident scenarios must not be made known to most exercise participants. The Corporation shall critique each exercise using individuals that do not have direct implementation responsibility for the plan. Critiques of exercises must evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques must be corrected."

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report
3. Facility and Process Description [Rev. A1, 3/6/95]

(In General—Procedural activities exist throughout this chapter.)

Source: Safety Analysis Report
4. Assessment of Accidents
4.3 Hazard Analysis

4.3.1 Hazards Analysis Methodology
4.3.1.1 Hazard Identification Methodology [Rev. A4, 3/31/95]

"The identification of uranium-related hazards relied heavily upon past experience, engineering judgement and analysis, and industry experience and analysis methodologies. . . . Once the hazards, physical states, and quantities were identified, a systematic review of the plant operation was performed to identify process parameters which, if changed, could result in a release of the hazard and subsequent toxicological/radiological consequences."

4.3.2 Hazards Analysis Results
4.3.2.3 Accident Selection [Rev. A4, 3/31/95]

"Table 4.3-5 identifies the systems, structures, and components in the main process buildings that could prevent and/or mitigate the progression of each of the scenarios identified. The detailed accident analysis identifies those systems, structures, and components that are critical to the protection of the public and for which Technical Safety Requirements have been imposed to ensure adequate protection of the public."

4.4 Accident Analysis
4.4.1 Methodology [Rev. A4, 3/31/95]

"Accident Scenarios. In addition, the accident scenarios discuss other systems that could be used to help mitigate the event; however, no credit is taken for these systems in the accident analysis. In developing this scenario, it was assumed that plant structures, systems, and components respond to the initiating event based on their design criteria and that plant personnel perform in accordance with plant procedures. . . .

Technical Basis for TSRs. As discussed above, the accident scenarios identify certain structures, systems, and components, safety design features, and administrative controls that are necessary to prevent or mitigate accidents that could potentially result in significant consequences or that establish/maintain initial conditions assumed in the accident analysis in order to provide adequate protection to the public health and safety. Based upon these results, Technical Safety Requirements are specified for these structures, systems, and components, and procedures prescribe the actions that must be performed to control or mitigate accidents. The combinations of these plant features and personnel actions provide adequate protection of the public health and safety."

[Procedural controls to mitigate accident analysis scenario results described in Section 4.4.2 have been provided in Sections 4.4.2.1, "Rupture of a Cylinder in an Autoclave;" 4.4.2.2, "Pigtail Failure Outside Autoclave—Liquid Release;" 4.4.2.3, "Liquid Cylinder Failure Scenario;" 4.4.2.4, "Pigtail Failure at Withdrawal Position;" and 4.4.2.5, "'B' Line Failure Above Atmospheric Pressure."]

Source: Safety Analysis Report
5. Safety Programs
5.1 Environmental Protection—Radiological
5.1.1 Effluent Control Systems
5.1.1.1 Airborne Effluents
5.1.1.1.3 Airborne Effluent Controls [Rev. A4, 3/31/95]

"The Paducah environmental program includes a system of process and administrative controls to prevent the discharge of radionuclides above regulatory limits and to maintain airborne effluents ALARA."

5.1.1.2 Waterborne Effluents
5.1.1.2.3 Waterborne Effluent Controls [Rev. A4, 3/31/95]

"The Paducah environmental program includes a system of process and administrative controls to prevent the discharge of radionuclides above regulatory limits and to maintain waterborne effluents ALARA."

5.2 Nuclear Criticality Safety
5.2.2 Program Elements
5.2.2.1 Nuclear Criticality Safety Responsibilities [Rev. A1, 3/29/95]

"The division managers are responsible for identifying operations requiring NCS evaluation, requesting NCS approvals, and implementing requirements contained in the approvals. The fissile material operators are responsible for conducting operations in a safe manner in compliance with operating procedures and may stop operations for safety reasons. The manager of NCS is responsible for the administration of the NCS program. This includes ensuring the NCS staff members are placed, trained and qualified in accordance with written procedures. . . ."

5.2.2.2 Process Evaluation and Approval [Rev. A1, 3/29/95]

"Each operation involving uranium enriched to 1 wt % or higher ^{235}U and 15 grams or more of ^{235}U is evaluated for NCS prior to initiation. . . . The evaluation is documented in a Nuclear Criticality Safety Evaluation (NCSE). The evaluation and approval process is governed by written procedures. . . . Requirements for inclusion of instructions in operating procedures and postings may be identified. . . ."

5.2.2.5 Procedure Requirements [Rev. A1, 3/29/95]

"Operating procedures contain appropriate controls for processing, storing, and handling of fissile material. Any requirements specifically identified in applicable NCSAs are incorporated."

5.3 Radiation Protection
5.3.1 Radiation Protection Program
5.3.1.3 Radiation Protection Program Elements [Rev. A1, 3/31/95]

"The RP program includes the following elements: . . . . 2. Approved written, and controlled procedures which implement the RP program . . ."

5.3.1.4 Radiological Protection Procedures [Rev. A1, 3/31/95]

"The *Radiological Protection Manual* is reviewed annually. Approved, written procedures are prepared and issued to implement the manual."

5.4 Fire Protection

5.4.2 Fixed Fire Suppression and Fire Detection Systems [Rev. A1, 4/3/95]

"These fixed fire suppression systems are inspected, tested, and maintained on a regular basis in accordance with approved procedures. . . ."

5.4.3 Mobile and Portable Equipment [Rev. A1, 4/3/95]

"Portable fire extinguishers are available throughout the plant and inspected on a regular basis in accordance with approved procedures."

5.5 Transportation [Rev. A1, 3/22/95]

"10 CFR 76.60(g) applies the requirements of 10 CFR Part 71 to USEC. The packaging and transportation of radioactive materials are conducted in accordance with 10 CFR Part 71. Full compliance with this part is dependent on the approval and implementation of a quality assurance program that meets the requirements of 10 CFR Part 71 Subpart H. A transportation quality assurance plan has been submitted separately from this application."

Source: Safety Analysis Report
6. Organization and Operating Programs
6.2 Plant Operations Review Committee (PORC)
6.2.2 Organization and Position Within the Plant [Rev. A2, 03/31/95]

"The PORC is chaired by the plant manager. . . . The charter, composition, and committee conduct are established in plant procedures."

6.3 Training
6.3.1 General Employee Training
6.3.1.3 General Topics [Rev. A1, 3/31/95]

"General Topics include a general overview of . . . (3) use of procedures and conduct of operations."

6.4 Operating Procedures
6.4.1 Scope [Rev. A1, 3/31/95]

"USEC utilizes approved and controlled written procedures applicable to activities directly relevant to nuclear safety, safeguards and security. Areas where such procedures may be required include: Environmental safety—radiological; Nuclear criticality safety; Radiation protection; Fire protection; Regulated material packaging and transportation; Safety Review Committee; Training; Internal audits and inspections; Investigations and reporting; Records management and document control; Changes in facilities and equipment; Design activities; Effects of natural phenomena; Building and process ventilation and offgas; Radioactive waste management; Maintenance; Environmental protection; Accident analysis; Chemical safety; Sharing of facilities, structures, systems and components; Utilities essential to radiological safety; Operations; Nuclear material control and accountability; Physical security; Emergency preparedness; Quality assurance."

6.4.2 Procedures Program
6.4.2.1 Procedures Development [Rev. A1, 3/31/95]

"Procedures are developed, written, and reviewed by the organization tasked with their use, with the assistance of the procedure program organization when needed."

6.4.2.2 Procedure Change Process [Rev. A1, 3/31/95]

"Procedures are changed through a formal change process that satisfies the requirements set forth in 10 CFR 76.68 and is under the control of the procedures program organization. Changes to procedures are subjected to a review process which is similar to that originally applied to the procedure being changed, as described above."

6.4.2.3 Procedures Control and Distribution [Rev. A1, 3/31/95]

"The procedures control and distribution process assures that up-to-date, approved procedures are available for use by plant personnel, as required. Under this process, copies of approved procedures are controlled by the document control organization. These controlled copies are distributed, along with a receipt/acknowledgement transmittal, exclusively to designated controlled procedure manual holders. Controlled procedures are stamped "Controlled Copy" in red ink on the title page. Working copies are so stamped and may be used for 10 days after the date issued. . . . Approved procedures are maintained in electronic or hard-copy format. Approved procedures are available for use by plant personnel through the document control organization, an electronic database, or the designated controlled procedure manual holders."

6.4.2.4 Procedure Usage [Rev. A1, 3/31/95]

"Portions of procedures designated as 'In-Hand' must be performed sequentially, step-by-step as written unless specifically exempted. The entire procedure or a portion of the procedure may be designated as 'In-Hand.' Approved procedures describe correct procedure usage as well as the proper use and control of working copies."

6.4.2.5 Periodic Reviews [Rev. A1, 3/31/95]

"Procedures are periodically reviewed by the Approval Authority or his designee according to the PCP and on a frequency determined by the procedure type."

6.5 Internal Program Reviews [Rev. A1, 3/22/95]

"These reviews are conducted using written plans to verify that these operations conform to regulatory requirements . . ."

6.6 Event Investigations and Reporting
6.6.2 Scope [Rev. A2, 3/29/95]

"The Problem Reporting Procedure (PRP) and Nuclear Regulatory Event Reporting Procedure (NERP) work together to ensure that abnormal events and conditions occurring at the plant are (1) promptly reported to appropriate plant personnel (2) assessed, and (3) when required, reported to the NRC Operations Center."

6.7 Records Management and Document Control
6.7.1 Records Management Program Elements [Rev. A1, 3/29/95]

"This program is implemented through procedures which provide guidance. . . ."

6.7.2 Document Control Program Elements [Rev. A1, 3/29/95]

"This program is implemented through procedures which provide guidance. . . ."

Source: Technical Safety Requirements for Paducah Gaseous Diffusion Plant
3.0 Administrative Controls
3.6 Procedures and Safety Topics
3.6.1 Procedures [Rev. A2, 03/31/95]

"Written standard operating and emergency response procedures are established and maintained to implement the safety topics discussed in section 3.6.2 and to ensure the accident analysis assumptions remain valid. These procedures are reviewed and updated according to procedure management guidelines."

3.6.2 Safety Topics [Rev. A2, 3/31/95]

"Programs are established to protect the public health and safety from radiological and toxicological hazards. The following provides references to or describes the procedures and/or equipment for the corresponding safety topic: (a) Effects of Natural Phenomena . . . (b) Building and Process Ventilation and Offgas . . . (c) Criticality Prevention . . . (d) Fire Prevention . . . (e) Radiation Protection . . . (f) Radioactive Waste Management . . . (g) Maintenance . . . (h) Environmental Protection . . . (i) Packaging and Transporting Nuclear Materials . . . (j) Accident Analysis . . . (k) Chemical Safety . . . (l) Sharing of Facilities, Structures, Systems, and Components . . . (m) Utilities Essential to Radiological Safety . . . (n) Operations."

Source: Paducah Gaseous Diffusion Plant—Fundamental Nuclear Materials Control Plan
3. Procedures [Rev. A0, 1/10/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Security Plan for the Protection of Classified Matter
5. Security Facility [Rev. A1, 3/29/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Emergency Plan
Plan Summary [Rev. A1, 3/22/95]

"This plan is implemented by the Emergency Plan Implementing Procedures (EPIPs) listed in Appendix A."

7. Maintaining Emergency Preparedness Capability
7.1 Written Emergency Plan and Procedures [Rev. A1, 3/21/95]

"EPIPs are revised, reviewed, approved, controlled, and distributed in accordance with plant administrative procedure requirements."

7.5 Program Audit [Rev. A1, 3/21/95]

"The Emergency Management Program is audited annually. . . . Procedures require that the audited organization investigate adverse audit findings . . . and notify the appropriate organization in writing of the actions taken or planned. Procedures require that follow-up actions be taken to verify that corrective actions are completed as scheduled."

Source: Quality Assurance Program
2. Requirements
2.2 Quality Assurance Program
2.2.3 Program Implementation [Rev. A0, 1/20/95]

"This QAP is implemented through policies, procedures, instructions, specifications, drawings, procurement documents, contractual documents, and other documents. Provisions are established to ensure that these documents are consistent with this QAP, the Safety Analysis Report, the Technical Safety Requirements document, and regulatory requirements. These documents also provide measures which ensure that activities within the scope of this QAP are planned and accomplished under suitably controlled conditions as necessary to accomplish the goals and objectives of this QAP. . . . To the extent that such activities are not being performed at the Paducah plant, the described procedures or other controls may not yet be in place. However, as described in this QAP, such activities will not be conducted until the relevant QAP required procedures or controls are in place. . . ."

2.3 Design Change Control
2.3.1 General [Rev. A0, 1/20/95]

"These requirements and controls ensure that . . . design requirements such as design bases, regulatory requirements and appropriate quality standards are correctly translated into design output, procurement and procedural documents. . . ." [See Section 2.3.3 "Requirements" for specific design input, design verification, design change, and design interface procedures to be developed in implementing Section 2.3 Design Change Control QA provisions.]

2.4 Procurement Document Control
2.4.2 Responsibilities [Rev. A0, 1/20/95]

"The design authority is also responsible for development of procedures that define these activities. . . ." [See Section 2.4.3 'Requirements' for specific procurement document content, procurement document review, and procurement document change control procedural requirements to be developed in implementing Section 2.4 'Procurement Document Control' QA provisions.]

2.5 Instructions, Procedures, and Drawings
2.5.1 General [Rev. A0, 1/20/95]

"The requirements for instructions, procedures, and drawings are applied to Class I items, and related activities and services within the scope of the QAP as described in Section 2.2, are based on ASME NQA-1-1989, Basic Requirement 5, and this section. Measures are in place to ensure that activities affecting quality are prescribed by documented procedures, drawings, and instructions, as appropriate, and are accomplished in accordance with these

documents. These documents also include quantitative and qualitative acceptance criteria to ensure that important operations have been satisfactorily accomplished." [See Section 2.5.3 'Requirements' for specific procedural requirements to be developed in implementing Section 2.5 'Instruction, Procedures, and Drawings' QA provisions.]

2.6 Document Control
2.6.3 Requirements [Rev. A0, 1/20/95]

"Procedures for the control of document preparation, review, approval, and issuance are established to ensure the following: . . . ."

2.7 Control of Purchased Items and Services
2.7.2 Responsibilities [Rev. A0, 1/20/95]

"The Division Manager—Quality Assurance is also responsible for the development and maintenance of an approved suppliers list and developing and implementing procedures which meet the requirements of this section of the QAP." [See Section 2.7.3 'Requirements' for specific supplier selection, supplier evaluation, control of supplier documents and changes to procurement documents, methods of acceptance for items, acceptance of services, control of supplier nonconformances, and commercial grade items procedural requirements to be developed in implementing Section 2.7 'Control of Purchased Items and Services' QA provisions.]

2.8 Identification and Control of Items
2.8.2 Responsibility [Rev. A0, 1/20/95]

"The design authority is responsible for the identification of items with limited shelf life or operating life. These identification, traceability, and shelf life and operating life requirements are established during the generation of specifications, drawings, procurement documents or other documents appropriate to the circumstances." [See Section 2.8.3 'Requirements' for specific identification methods, identification and traceability, limited life items, and maintaining identification of stored items procedural requirements to be developed in implementing Section 2.8 'Identification and Control of Items' QA provisions.]

2.9 Control of Processes
2.9.2 Responsibilities [Rev. A0, 1/20/95]

"The design authority is responsible for determining special processes, providing technical requirements for identified special processes, and reviewing and concurring with all special process procedures. . . ." [See Section 2.9.3 'Requirements' for specific special process, acceptance criteria, and records procedural requirements to be developed in implementing Section 2.9 'Control of Processes' QA provisions.]

2.10 Inspection
2.10.3 Requirements [Rev. A0, 1/20/95]

"Procedures are established or governing the inspection of items and activities to ensure the following: . . . ."

2.11 Test Control

2.11.1 General [Rev. A0, 1/20/95]

"A system for test control is established for Class I items within the scope of this QAP. . . . The system requires written test procedures identifying prerequisites with provisions for documenting and evaluating test results to assure that requirements are satisfied." [See Section 2.11.3 'Requirements' for specific test control and computer program testing procedural requirements to be developed in implementing Section 2.11 'Test Control' QA provisions.]

2.12 Control of Measuring and Test Equipment
2.12.3 Requirements [Rev. A0, 1/20/95]

"Procedures are established for the control of measuring and test equipment that provide measures that ensure the following: . . . ."

2.13 Handling, Storage, and Shipping
2.13.2 Responsibilities [Rev. A0, 1/20/95]

"The design authority is responsible for specifying the requirements for handling, storage, shipping, cleaning, packaging, and on site movement of items in specifications, drawings, instructions, procedures, procurement documents, and/or other appropriate documents, in accordance with requirements of this section of the QAP. . . ." [See Section 2.13.3 'Requirements' for specific procedural requirements to be developed in implementing Section 2.13 'Handling, Storage, and Shipping' QA provisions.]

2.14 Inspection, Test, and Operating Status
2.14.2 Responsibilities [Rev. A0, 1/20/95]

"Division/departments participating in testing and operational activities of the facilities are responsible for the development and implementation of status indicating systems which are consistent with the requirements of this section of the QAP." [See Section 2.14.3 'Requirements' for specific procedural requirements to be developed in implementing Section 2.14 'Inspection, Test, and Operating Status' QA provisions.]

2.15 Control of Nonconforming Items
2.15.3 Requirements [Rev. A0, 01/20/95]

"Procedures are established . . . which ensure the following: . . . ."

2.16 Corrective Action
2.16.2 Responsibilities [Rev. A0, 1/20/95]

"Division/department managers are responsible for . . . assuring the identification and documentation of conditions adverse to quality in accordance with applicable procedures." [See Section 2.16.3 'Requirements' for specific procedural requirements to be developed in implementing Section 2.16 'Corrective Action' QA provisions.]

2.17 Quality Assurance Records
2.17.3 Requirements [Rev. A0, 1/20/95]

"Procedures for the identification and control of quality assurance records are established which provide measures to ensure the following: . . . ."

2.18 Audits
2.18.1 General [Rev. A0, 1/20/95]

"Audits are executed in accordance with established procedures and are performed by personnel having no direct responsibilities in the areas being audited. . . ." [See Section 2.18.3 'Requirements' for specific training and qualification, scheduling, audit plan, personnel and selection of audit team, audit performance, reporting, and response and follow-up action procedural requirements to be developed in implementing Section 2.18 'Audits' QA provisions.]

2.19 Quality Program for Class II SSCs [Rev. A0, 1/20/95]

"Class II items and activities are not subject to the full scope of the QAP described in Sections 2.3 through 2.18 above. As described below, Class II SSCs are subject to controls commensurate with those used in the past which have provided adequate levels of quality. . . ."

DESCRIPTION OF NONCOMPLIANCE

Some of the written procedures, including administrative and technical procedures, have not been prepared, revised, approved, and implemented with the assumptions, administrative controls, and technical requirements described in the Safety Analysis Report, Technical Safety Requirements, and associated 10 CFR requirements. Some of the appropriate personnel have not been trained to use the new procedures and requirements. The procedures to be revised or prepared include those for effects of natural phenomena; building and process ventilation and offgas; criticality prevention; fire protection; radiation protection; radioactive waste management; maintenance; environmental protection; packaging and transporting nuclear materials; accident analysis; chemical safety; sharing of facilities, structures, systems and components; utilities essential to radiological safety; and operations.

Plant activities are conducted through approved written procedures. However, the quality and consistency of the procedures do not always meet current industry standards for NRC-regulated activities. In many cases, existing policies and procedures do not fully implement applicable regulatory requirements or fully reflect current plant practices. In addition, many of the procedures are not user-friendly in that they are either unduly complicated or lack clarity. In several instances, the ownership and responsibility for implementing procedures are not accurately stated, resulting in inconsistent implementation.

JUSTIFICATION FOR CONTINUED OPERATION

The current administrative and technical procedures implement the DOE Regulatory Oversight Agreement (ROA) requirements and contain the necessary instructions to ensure that facility activities affecting nuclear safety, safeguards, and security are performed within the controls of the hazard analysis and safety reviews. The site will continue to utilize these procedures until (1) new or revised procedures are prepared and implemented and (2)

training is conducted for appropriate personnel before they use the new or revised requirements.

For routine activities for which the current procedures do not provide the degree of rigor expected, adequate safety is assured through on-the-job training provided to less experienced facility personnel and through the "skill of the craft" of experienced facility personnel. For nonroutine activities, these measures are supplemented with appropriate pre-job briefings addressing any deficiencies in the current procedures.

PLAN OF ACTION AND SCHEDULE

The procedure enhancement efforts to achieve compliance with the 10 CFR 76 requirements include the following actions:

1. The required administrative and technical procedures to meet the commitments as stated in the application will be upgraded under the Nuclear Safety Procedures Upgrade Project. Policies and procedures relevant to nuclear safety and safeguards and security will be developed or revised, as appropriate, in the following functional areas:

    - environmental safety—radiological,
    - nuclear criticality safety,
    - radiation protection,
    - fire protection,
    - regulated material packaging and transportation,
    - safety review committee,
    - training,
    - internal audits and inspections,
    - investigations and reporting,
    - records management and document control,
    - change control and configuration management,
    - design activities,
    - effects of natural phenomena,
    - building and process ventilation and offgas,
    - radioactive waste management,
    - maintenance,
    - environmental protection,
    - accident analysis,
    - chemical safety,
    - sharing of facilities, structures, systems, and components,
    - utilities essential to radiological safety,
    - operations,
    - nuclear material control and accountability,
    - physical security,
    - emergency preparedness,
    - quality assurance,
    - change control and configuration management,
    - technical safety requirements implementation, and
    - protection of classified information and material.

2. The TSR-identified requisite policies and procedures will be implemented after NRC has approved the TSRs submitted as part of the application for certification. Requisite training for compliance with the TSRs will occur as rapidly as is consistent with a safe, orderly transition. The transition from the DOE-approved OSRs to the NRC-approved TSRs will be completed within 120 days after the date of the NMSS Director's decision on the initial certification of compliance.

3. Appropriate training materials to address the new and revised administrative and technical procedures identified in action items 1 and 2 above will also be developed/upgraded under the Nuclear Safety Procedures Upgrade Project. Personnel responsible for implementing the upgraded administrative and technical procedures will receive training on each appropriate procedure prior to their use of the procedure.

The scheduled completion date for this plan of action is December 31, 1996.

NRC Administrative/Reporting Requirements Program

REQUIREMENTS

10 CFR 76.7(a)—"Discrimination by the Corporation, a contractor, or a subcontractor of the Corporation against an employee for engaging in certain protected activities is prohibited. Discrimination includes. . . ."

10 CFR 76.9—"(a) Information provided to the Commission or information required by statute or by the Commission's rules, regulations, standards, orders, or other conditions to be maintained by the Corporation must be complete and accurate in all material respects. (b) The Corporation shall notify the Commission of information identified as having for the regulated activity a significant implication for public health and safety or common defense and security. . . . Notification must be provided to the Administrator of NRC's Region III Office within 2 working days of identifying the information. . . ."

10 CFR 76.10(a)—"(a) The Corporation or any employee of the Corporation and any contractor (including a supplier or consultant), subcontractor, or any employee of a contractor or subcontractor, who knowingly provides to the Corporation, or any contractor or subcontractor, components, equipment, materials, or other goods or services, that relate to the Corporation's activities subject to this part; may not: (1) Engage in deliberate misconduct that causes or, but for detection, would have caused, the Corporation to be in violation of any rule, regulation, or order, or any term, condition, or limitation of a certificate or approval issued by the Commission; or (2) Deliberately submit to the NRC, the Corporation, or its contractor or subcontractor, information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the NRC. . . ."

10 CFR 76.31—"The Corporation shall file an initial certificate application in 1995, and thereafter, the Corporation shall apply to the Commission each year on or before April 15, for a certificate of compliance in accordance with § 76.36."

10 CFR 76.33—"(a) Filing requirements. (1) An application for an initial certificate of compliance must be tendered by filing 20 copies of the application with the Director, Office of Nuclear Material Safety and Safeguards, with copies sent to the NRC Region III Office and appropriate resident inspector, in accordance with § 76.5 of this part. (2) The application must include the full name, address, age (if an individual), and citizenship of the applicant. If the applicant is a corporation or other entity, it shall indicate the State where it was incorporated or organized, the location of the principal office, the names, addresses, and citizenship of its principal office, the names, addresses, and citizenship of its principal officers, and shall include information known to the applicant concerning the control or ownership, if any, exercised over the applicant by any alien, foreign corporation, or foreign government. (b) Oath or affirmation. An application for an initial certificate of compliance must be executed in a signed original by a duly authorized officer of the Corporation under oath or affirmation. (c) Pre-filing consultation. The Corporation may confer with the Commission's staff prior to filing an initial application. (d) Additional information. At any time during the review of an initial application, the Corporation may be required to supply additional information to the Commission's staff in order to enable the Commission or the Director, as

appropriate, to determine whether the certificate should be issued or denied, or to determine whether a compliance plan should be approved. (e) Withholdable information. An initial application which contains Restricted Data, National Security Information, Safeguards Information, Unclassified Controlled Nuclear Information, proprietary data, or other withholdable information, must be prepared in such a manner that all such information or data are separated from the information to be made available to the public."

10 CFR 76.35—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report which must include the following information: . . . (7) A description of the management controls and oversight program to ensure that activities directly relevant to nuclear safety and safeguards and security are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety and protection of the national security interests . . . (b) A plan prepared and approved by DOE for achieving compliance with respect to any areas of noncompliance with the NRC's regulations that are identified by the Corporation as of the date of the application that includes: (1) A description of the areas of noncompliance; (2) A plan of actions and schedules for achieving compliance; and (3) A justification for continued operation with adequate safety and safeguards . . ."

10 CFR 76.36(a)—"(a) After issuance by the Commission of the initial certificate of compliance and/or an approved compliance plan, the Corporation shall file an annual application for renewal, as required by § 76.31."

10 CFR 76.45—"(a) Contents of amendment application. In addition to the annual application for certification submitted pursuant to § 76.31, the Corporation may at any time apply for amendment of the certificate to cover proposed new or modified activities. . . . (c) Oath or affirmation. An application for an amendment of the certificate of compliance must be executed in a signed original by the Corporation under oath or affirmation."

10 CFR 76.51—"The Corporation shall comply with the certificate of compliance, any approved compliance plan, and the requirements set forth and referenced in this part, except as may be modified by the certificate or approved compliance plan."

10 CFR 76.60(c)—"The Corporation shall comply with the applicable provisions of 10 CFR part 19, 'Notices, Instructions and Reports To Workers: Inspection and Investigations,' with the following modifications: (1) Civil penalties may not be imposed on the Corporation pursuant to § 19.30 of this chapter except for violations of Section 206 of the Energy Reorganization Act. (2) The Corporation shall post NRC Form 3 not later than the date of Director's decision on the initial certificate of compliance and/or an initial plan for achieving compliance, during the term of the certificate, and for 30 days following certificate termination." (NOTE: § 19.11 describes administrative/reporting requirements.)

10 CFR 76.60(d)—"The Corporation shall comply with the applicable provisions of 10 CFR part 20, 'Standards For Protection Against Radiation'. . . ." (NOTE: §§ 20.2201, 20.2202, 20.2203, 20.2204, and 20.2206 describe administrative/reporting requirements.)

10 CFR 76.60(e)—"The Corporation shall comply with the applicable provisions of 10 CFR part 21, 'Reporting of Defects and Noncompliance,' with the following modifications: (1) The Corporation shall comply with the requirements in §§ 21.6 and 21.21 not later than

the date of the Director's decision on the initial certificate of compliance and/or an initial plan for achieving compliance." (NOTE: § 21.21 describes administrative/reporting requirements.)

10 CFR 76.60(f)—"The Corporation shall comply with the applicable provisions of 10 CFR part 26, 'Fitness-for-Duty Programs.' The requirements of this section apply only if the Corporation elects to engage in activities involving formula quantities of strategic special nuclear material. When applicable, the requirements apply only to the Corporation and personnel carrying out the activities specified in § 26.2(a)(1) through (5)." (NOTE: § 26.73 and 10 CFR 26 Appendix A describe administrative/reporting requirements.)

10 CFR 76.60(g)—"The Corporation shall comply with the applicable provisions of 10 CFR part 71, 'Packaging and Transportation of Radioactive Material'." (NOTE: §§ 71.93, 71.95, and 71.97 describe administrative/reporting requirements.)

10 CFR 76.60(h)—"The Corporation shall comply with the applicable provisions for physical security and material control and accounting as specified in subpart E to this part and contained in 10 CFR part 70, 'Domestic Licensing of Special Nuclear Material,' part 73, 'Physical Protection of Plants and Materials,' and part 74, 'Material Control and Accounting of Special Nuclear Material'. . . ." (NOTE: §§ 70.22, 70.50, 70.52, 73.71, 10 CFR 73 Appendix G, and § 74.11 describe administrative/reporting requirements.)

10 CFR 76.60(i)—"The Corporation shall comply with the applicable provisions of 10 CFR part 95, 'Security Facility Approval and Safeguarding of National Security Information and Restricted Data'. . . ." (NOTE: §§ 95.25, 95.37, and 95.57 describe administrative/reporting requirements.)

10 CFR 76.68—"(a) The Corporation may make changes to the plant or to the plant's operations as described in the safety analysis report without prior Commission approval provided all the provisions of this section are met: . . . . (b) To ensure that the approved application remains current with respect to the actual site description and that the plant's programs, plans, policies, and operations are in place, the Corporation shall submit revised pages to the approved application and safety analysis report. . . . (c) The Corporation shall maintain records of changes. . . . (d) The Corporation may at any time apply under § 76.45 for amendment of the certificate to cover proposed new or modified activities not permitted by paragraph (a) of this section."

10 CFR 76.70—"(a) Amendment of certificate terms and conditions. The terms and conditions of a certificate of compliance or an approved compliance plan are subject to modification by reason of amendments to the Act, or by reason of rules, regulations, or orders issued in accordance with the Act. . . . (d) Notice of Violation. (1) In response to an alleged violation of any provision of the Act or NRC regulations or the conditions of a certificate, compliance plan, or an order issued by the Commission, the Commission may serve on the Corporation or other person subject to the jurisdiction of the Commission a written notice of violation. A separate notice may be omitted if an order or demand for information pursuant to this section is issued that otherwise identifies the apparent violation. The notice of violation will concisely state the alleged violation and will require the Corporation or other person subject to it, within twenty (20) days of the date of the notice or other specified time, to submit a written explanation or statement in reply including: (i) Corrective steps which have been taken by the Corporation or other person and the results achieved; (ii) Corrective

steps which will be taken; and (iii) The date when full compliance will be achieved. (2) The notice may require the Corporation or other person subject to the jurisdiction of the Commission to admit or deny the violation and to state the reasons for the violation, if admitted. It may provide that, if an adequate reply is not received within the time specified in the notice, the Commission may issue an order or a demand for information as to why the certificate should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. (e) Additional information. At any time after the granting of a certificate of compliance or approval of a compliance plan, the Commission may require further statements from the Corporation, signed under oath or affirmation, in order to enable the Commission to determine whether the certificate or approved compliance plan should be modified or revoked."

10 CFR 76.87(d)—"Technical safety requirements must include items in the following categories: (1) Safety limits . . . (ii) If any safety limit is exceeded, the Corporation shall notify the Commission if required by § 76.120, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. . . . (2) Limiting control settings . . . (ii) If, during operation, an automatic alarm or protective device does not function as required, the Corporation shall notify the Commission if required by § 76.120, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. . . . (3) Limiting conditions for operation . . . (i) If a limiting condition for operation of any process step in the system is not met, the Corporation shall notify the Commission if required by § 76.120, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. . . ."

10 CFR 76.91—"The Corporation shall establish, maintain, and be prepared to follow a written emergency plan. The emergency plan submitted under § 76.35(d) must include the following information: . . . (h) Notification and coordination. A commitment to and a brief description of the means to promptly notify off-site response organizations, including the request for off-site assistance and medical assistance for the treatment of contaminated injured on-site workers when appropriate. A control point must be established. The notification and coordination must be planned so that unavailability of some personnel, parts of the plant, and some equipment does not prevent the notification and coordination. The Corporation shall also commit to notify the NRC Operations Center immediately after notification of the appropriate off-site response organizations and not later than 1 hour after the Corporation declares an emergency. These reporting requirements do not supersede or release the Corporation from complying with the requirements under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, or other State or Federal reporting requirements. (i) Information to be communicated. A brief description of the plant status, radioactive releases, and recommended protective actions, if necessary, to be provided to off-site response organizations and to the NRC. . . ."

10 CFR 76.120—"(a) Immediate report. The Corporation shall notify the NRC Operations Center within 1 hour after discovery of . . . (b) Four-hour report. The Corporation shall notify the NRC Operations Center as soon as possible but not later than 4 hours after discovery of . . . (c) Twenty-four hour report. The Corporation shall notify the NRC Operations Center within 24 hours after the discovery of any of the following events involving radioactive material . . . (d) Preparation and submission of reports. Reports made by the Corporation in response to the requirements of this section must be made as follows: . . . ."

10 CFR 76.121—"(a) The Corporation shall afford to the Commission opportunity to inspect the premises and plants under the Corporation's control where radioactive material is used, produced, or stored. (b) The Corporation shall make available to the Commission for inspection records. . . . (c) (1) The Corporation shall provide rent-free office space for the exclusive use of Commission inspection personnel. . . ."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report
5. Safety Programs
5.5 Transportation [Rev. A1, 3/22/95]

"10 CFR 76.60(g) applies the requirements of 10 CFR Part 71 to USEC. The packaging and transportation of radioactive materials are conducted in accordance with 10 CFR part 71. Full compliance with this part is dependent on the approval and implementation of a quality assurance program that meets the requirements of 10 CFR Part 71 Subpart H. A transportation quality assurance plan has been submitted separately from this application."

Source: Safety Analysis Report
6. Organization and Operating Programs
6.6 Event Investigations and Reporting
6.6.1 Introduction [Rev. A2, 3/29/95]

"10 CFR 76.35(a)(7) requires USEC to describe its management controls and oversight program governing activities directly relevant to nuclear safety, safeguards, and security. 10 CFR 76.120 and other applicable regulations referenced in 10 CFR 76.60 require USEC to notify the NRC of certain events and conditions at the plant and to conduct certain follow-up activities with respect to these events and conditions. USEC satisfies the requirements of 10 CFR 76.120 and the applicable event reporting requirements by following the applicable operating procedures governing problem reporting and nuclear regulatory event reporting."

6.6.2 Scope [Rev. A2, 3/29/95]

"The Problem Reporting Procedure (PRP) and Nuclear Regulatory Event Reporting Procedure (NERP) work together to ensure that abnormal events and conditions occurring at the plant are (1) promptly reported to appropriate plant personnel (2) assessed, and (3) when required, reported to the NRC Operations Center. A follow-up investigation is conducted for each event or condition requiring NRC notification with a written report provided to the NRC within 30 days of the event."

6.6.2.2 Event Categorization [Rev. A2, 3/29/95]

"In accordance with the NERP, the PSS is responsible for assessing and categorizing abnormal events or conditions reported by plant personnel using the criteria set forth in 10 CFR 76.120(a)–(c) and other applicable referenced NRC regulations as shown in Table 6.6-1."

6.7 Records Management and Document Control
6.7.1 Records Management Program Elements
6.7.1.12 Types of Records [Rev. A1, 3/29/95]

"Health and Safety records that will be retained for the duration of the NRC Certificate of Compliance for the plant, include, but are not limited to: . . ."

Source: Technical Safety Requirements for Paducah Gaseous Diffusion Plant
3.0 Administrative Controls
3.7 Conditions Outside TSR [Rev. A2, 3/31/95]

"In an emergency, . . . operations personnel may take actions that depart from a requirement in the TSR provided that . . . [i]f emergency action is taken, both a verbal and written notification shall be made in accordance with 10 CFR 76.120."

Source: Paducah Gaseous Diffusion Plant—Fundamental Nuclear Materials Control Plan
12. Program for Precluding and Detecting Unauthorized Production of Enriched Uranium
12.4 Decision Criteria for Declaring Unauthorized Production [Rev. A0, 1/10/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Security Plan for the Protection of Classified Matter
17. Reports to NRC [Rev. A1, 3/29/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Security Plan for the Transportation of Special Nuclear Material of Low Strategic Significance
5. Import Shipments
5.2 Reporting of Safeguards Events [Rev. A1, 3/23/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Emergency Plan
3. Classification and Notification of Accidents and Other Emergencies
3.2 Notification and Coordination
3.2.1 Alert [Rev. A1, 3/21/95]

"[T]he NRC Operations Center is notified by the PSS, or designee, by telephone immediately after notification of appropriate state and local authorities, not later than one hour after the declaration of an Alert. If the EOC has been activated and is operational, the CM [Crisis Manager] assumes responsibility from the PSS for NRC notification."

3.2.2 SAE (Site Area Emergency) [Rev. A1, 3/21/95]

"The NRC Operations Center is notified as soon as possible after the state and local notifications have been made, no later than one hour after the declaration of an SAE. Once

the EOC is operational, the CM and EOC staff are responsible for appropriate off-site notifications, including the NRC."

3.3 Information to be Communicated [Rev. A1, 3/21/95]

"The NRC Operations Center is notified immediately after notification of the appropriate state and local agencies, but not later than one hour after the declaration of an Alert or an SAE."

Source: Paducah Gaseous Diffusion Plant Emergency Plan
4. Responsibilities
4.4 Coordination with Participating Government Agencies
4.4.3 Federal Government Interfaces
4.4.3.1 United States Nuclear Regulatory Commission (NRC) [Rev. A1, 3/21/95]

"The NRC Operations Center is notified of any emergency immediately after notification of the appropriate off-site organizations, within one hour after the declaration of the emergency."

Source: Quality Assurance Program
2. Requirements
2.15 Control of Nonconforming Items
2.15.3 Requirements [Rev. A0, 1/20/95]

"Procedures are established to provide measures for the control of Class I items, and related activities and services that do not conform to specified requirements. These procedures establish measures which ensure the following: . . . (4) Nonconforming items or services are evaluated to determine whether a particular deviation could create a substantial safety hazard and to determine whether reporting is required in accordance with the provisions of 10 CFR part 21."

DESCRIPTION OF NONCOMPLIANCE

Development of an NRC administrative/reporting requirements program as described in the commitments stated above, including development and implementation of administrative procedures, has not been completed for the following:

- event notification and reporting requirements in 10 CFR 76.91, 10 CFR 76.120, and the other regulations listed in 10 CFR 76.60;
- 10 CFR 21 administrative and reporting requirements in 10 CFR 76.60(e) and 10 CFR 21;
- plant change requirements in 10 CFR 76.68; and
- 10 CFR 19 administrative requirements in 10 CFR 76.60(c) and 10 CFR 19.

Some of the appropriate site personnel have not been trained on these new program requirements.

JUSTIFICATION FOR CONTINUED OPERATION

The current administrative/reporting requirements program procedures implement DOE Regulatory Oversight Agreement (ROA) requirements. These procedures provide the necessary controls for (1) identifying abnormal safety, safeguards, and security events meeting the ROA occurrence reporting criteria; (2) reporting these events to the appropriate site management personnel and to the appropriate DOE personnel; (3) investigating these events to determine their root cause(s); (4) developing, tracking, and implementing appropriate corrective actions to prevent their recurrence; and (5) responding to DOE ROA notices of violation, requests for additional information, and required submittals of changes to the safety analysis and Operational Safety Requirements. The site will continue to utilize these procedures until the NMSS Director's decision on the initial certification of compliance. Because the NRC administrative/reporting requirements program is not required until then, there is no impact on safety of the plant.

PLAN OF ACTION AND SCHEDULE

The actions planned to implement the NRC administrative/reporting requirements program in compliance with the 10 CFR 76 requirements include the following:

1. Procedures for event notification and reporting requirements in 10 CFR 76.91, 10 CFR 76.120, and the other regulations listed in 10 CFR 76.60 and for 10 CFR 21 administrative and reporting requirements in 10 CFR 76.60(e) and 10 CFR 21 will be upgraded.

2. Procedures for plant change requirements in 10 CFR 76.68 will be upgraded.

3. Procedures for 10 CFR 19 administrative requirements in 10 CFR 76.60(c) and 10 CFR 19 will be upgraded.

4. Training materials appropriate to address the new and revised administrative and technical procedures identified in action items 1 through 3 above will also be upgraded under the Nuclear Safety Procedures Upgrade Project. Personnel responsible for implementing the upgraded administrative and technical procedures will receive training on appropriate procedures prior to their use of the procedure.

The scheduled completion date for this plan of action is October 24, 1995.

Records Management and Document Control Programs

REQUIREMENTS

10 CFR 76.31—"The Corporation shall file an initial certificate application in 1995, and thereafter, the Corporation shall apply to the Commission each year on or before April 15, for a certificate of compliance in accordance with § 76.36."

10 CFR 76.35—"The application for an initial certificate of compliance must include the information identified in this section. (a) A safety analysis report which must include the following information: . . . (b) A plan prepared and approved by DOE for achieving compliance with respect to any areas of noncompliance with the NRC's regulations that are identified by the Corporation as of the date of the application that includes: . . . (c) Any relevant information concerning deviations from the published Environmental Impact Statement, Environmental Assessments, or environmental permits under which the plants currently operate . . . (d) A quality assurance program . . . (e) Technical safety requirements . . . A summary statement of the bases or reasons for the requirements, other than those covering administrative controls, must also be included in the application, but will not be considered part of the technical safety requirements. (f) An emergency plan . . . (g) A compliance status report that includes the status of various State, local and Federal permits, licenses, approvals, and other entitlements, as described in § 51.45(d) of this chapter. The report must include . . . (h) A fundamental nuclear material control plan . . . (i) A transportation protection plan . . . (j) A physical protection plan . . . (k) A plan describing the facility's proposed security procedures and controls as set forth in § 95.15(b) of this chapter for protection of classified matter. (l) In response to a written request by the Commission, the Corporation shall file with the Commission the installation information described in § 75.11 of this chapter on Form N-71. . . . (m) A description of the program, as appropriate, for processing, management, and disposal of mixed and radioactive wastes and depleted uranium generated by operations. . . . (n) A description of the funding program to be established to ensure that funds will be set aside and available for those aspects of the ultimate disposal of waste and depleted uranium, decontamination and decommissioning . . ."

10 CFR 76.36—"(a) After issuance by the Commission of the initial certificate of compliance and/or an approved compliance plan, the Corporation shall file an annual application for renewal, as required by § 76.31. (b) Information contained in previous applications, statements, or reports filed with the Commission may be referenced as part of the application, provided that the reference is clear and specific. (c) An application for renewal is subject to the requirements in § 76.33 and must contain the following information: (1) The information specified in § 76.35; or, (2) A statement by the Corporation that the NRC may rely upon the information provided in the previous application(s) upon which the existing certificate is based, except for: (i) Any proposed changes in the existing certificate of compliance conditions or technical safety requirements; (ii) Any proposed changes to the documents submitted with the previous application in accordance with § 76.35; (iii) Any changes which the Corporation has made without prior NRC approval pursuant to § 76.68; and, (iv) Any changes to certificate conditions or technical safety requirements for which the Corporation has sought and received Commission approval pursuant to § 76.45. (d) The changes which are submitted as part of an application for renewal in accordance with paragraph (c)(2), above,

must be in the form of specific changes to the documentation specified in § 76.35. The changes must be marked and dated for easy identification."

10 CFR 76.55—"In any case in which the Corporation has timely filed a sufficient annual application for a certificate of compliance, the existing certificate of compliance or approved compliance plan does not expire until the application for a certificate of compliance has been finally determined by the NRC. For purposes of this rule, a sufficient application is one that addresses all elements of § 76.36."

10 CFR 76.60(c)—"(c) The Corporation shall comply with the applicable provisions of 10 CFR part 19, 'Notices, Instructions and Reports To Workers: Inspection and Investigations'. . . ." (NOTE: §§ 19.13, 19.14, and 19.16 describe record requirements and § 19.11 describes document requirements.)

10 CFR 76.60(d)—"(d) The Corporation shall comply with the applicable provisions of 10 CFR part 20, 'Standards For Protection Against Radiation'. . . ." (NOTE: §§ 20.1204, 20.1206, 20.1703, 20.1905, 20.2005, 20.2006, 20.2101, 20.2102, 20.2103, 20.2104, 20.2105, 20.2106, 20.2107, 20.2108, and 20.2110 describe record requirements and §§ 20.1101, 20.1906, and 20.2203 describe document requirements.)

10 CFR 76.60(e)—"(e) The Corporation shall comply with the applicable provisions of 10 CFR part 21, 'Reporting of Defects and Noncompliance'. . . . (1) The Corporation shall comply with the requirements in §§ 21.6 and 21.21 not later than the date of the Director's decision on the initial certificate of compliance and/or an initial plan for achieving compliance." (NOTE: §§ 21.41 and 21.51 describe record requirements, and §§ 21.6 and 21.31 describe document requirements.)

10 CFR 76.60(f)—"(f) The Corporation shall comply with the applicable provisions of 10 CFR part 26, 'Fitness-for-Duty Programs.' The requirements of this section apply only if the Corporation elects to engage in activities involving formula quantities of strategic special nuclear material. When applicable, the requirements apply only to the Corporation and personnel carrying out the activities specified in § 26.2(a)(1) through (5)." (NOTE: §§ 26.2, 26.21, 26.22, 26.23, 26.24, 26.27, 26.70, 26.71, 26.80, and 10 CFR 26 Appendix A describe record requirements, and §§ 26.2, 26.20, 26.24, 26.29, 26.80, and 10 CFR 26 Appendix A describe document requirements.)

10 CFR 76.60(g)—"(g) The Corporation shall comply with the applicable provisions of 10 CFR part 71, 'Packaging and Transportation of Radioactive Material'." (NOTE: §§ 71.91, 71.97, 71.115, 71.117, 71.133, 71.135, and 71.137 describe record requirements, and §§ 71.5, 71.12, 71.16, 71.31, 71.33, 71.101, 71.105, 71.107, 71.109, 71.111, 71.113, 71.115, 71.121, 71.123, 71.131, and 71.135 describe document requirements.)

10 CFR 76.60(h)—"(h) The Corporation shall comply with the applicable provisions for physical security and material control and accounting as specified in subpart E to this part and contained in 10 CFR part 70, 'Domestic Licensing of Special Nuclear Material,' part 73, 'Physical Protection of Plants and Materials,' and part 74, 'Material Control and Accounting of Special Nuclear Material'." (NOTE: §§ 70.22, 70.32, 70.51, 73.24, 73.67, 73.71, 10 CFR 73 Appendix G, 74.33, and 74.81 describe record requirements, and §§ 70.5, 70.21, 70.22, 70.32, 70.51, 73.21, 73.67, 73.71, 74.6, 74.13, and 74.33 describe document requirements.)

10 CFR 76.60(i)—"(i) The Corporation shall comply with the applicable provisions of 10 CFR part 95, 'Security Facility Approval and Safeguarding of National Security Information and Restricted Data'. . . ." (NOTE: §§ 95.11, 95.13, 95.25, 95.33, 95.36, 95.37, 95.41, 95.45, 95.47, and 95.59 describe record requirements, and §§ 95.25, 95.35, 95.36, 95.37, 95.39, 95.45, 95.47, 95.53, and 95.57 describe document requirements.)

10 CFR 76.68(b)—"(b) To ensure that the approved application remains current with respect to the actual site description and that the plant's programs, plans, policies, and operations are in place, the Corporation shall submit revised pages to the approved application and safety analysis report, marked and dated to indicate each change. The Corporation shall evaluate any as-found conditions that do not agree with the plant's programs, plans, policies, and operations in accordance with paragraph (a) of this section. These revisions must be submitted annually as specified in § 76.36 of this part or at a shorter interval as may be specified in the certificate."

10 CFR 76.68(c)—"(c) The Corporation shall maintain records of changes in the plant and of changes in the programs, plans, policies, procedures and operations described in the approved application, and copies of the safety analyses on which the changes were based. The records of plant changes must be retained until the end of the duration of the lease. The records of changes in programs, plans, policies, procedures, and operations and copies of the safety analysis on which the changes were based must be retained for a period of 2 years."

10 CFR 76.83(d)—"(d) The following methods for the verification required by paragraph (c) of this section are acceptable: (1) The Corporation may have in its possession and read a current copy of the transferee's specific license or confirmation of registration. The Corporation shall retain a copy of each license or confirmation for 3 years from the date that it was obtained. (2) The Corporation may have in its possession a written confirmation by the transferee that the transferee is authorized by license or registration confirmation to receive the type, form, and quantity of special nuclear material to be transferred, specifying the license or registration confirmation number, issuing agency, and expiration date. The Corporation shall retain the written confirmation as a record for 3 years from the date of receipt of the confirmation; (3) For emergency shipments, the Corporation may accept a certification by the transferee that he or she is authorized by license or registration certification to receive the type, form, and quantity of special nuclear material to be transferred, specifying the license or registration number, issuing agency, and expiration date, provided that the oral confirmation is confirmed in writing within 10 days. The Corporation shall retain the written confirmation of the oral certification for 3 years from the date of receipt of the confirmation; (4) The Corporation may obtain other sources of information compiled by a reporting service from official records of the Commission or the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registrations. The Corporation shall retain the compilation of information as a record for 3 years from the date that it was obtained; or (5) When none of the methods of verification described in paragraphs (d) (1) to (4) of this section are readily available or when the Corporation desires to verify that information received by one of these methods is correct or up to date, the Corporation may obtain and record confirmation from the Commission or the licensing agency of an Agreement State that the transferee is licensed to receive the special nuclear material. The Corporation shall retain the record of confirmation for 3 years from the date the record is made."

10 CFR 76.87(c)—"(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements: (1) Effects of natural phenomena; (2) Building and process ventilation and offgas; (3) Criticality prevention; (4) Fire prevention; (5) Radiation protection; (6) Radioactive waste management; (7) Maintenance; (8) Environmental protection; (9) Packaging and transporting nuclear materials; (10) Accident analysis; (11) Chemical safety; (12) Sharing of facilities, structures, systems and components; (13) Utilities essential to radiological safety; and (14) Operations."

10 CFR 76.87(d)—"(d) Technical safety requirements must include items in the following categories: (1) Safety limits . . . (ii) If any safety limit is exceeded, the Corporation shall . . . review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. (iii) The Corporation shall retain the record of the results of each review until the Commission no longer has certification authority. (2) Limiting control settings . . . (ii) If, during operation, an automatic alarm or protective device does not function as required, the Corporation shall . . . review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. (iii) The Corporation shall retain the record of the results of each review until the Commission no longer has certification authority. (3) Limiting conditions for operation . . . (i) If a limiting condition for operation of any process step in the system is not met, the Corporation shall . . . review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. (ii) The Corporation shall retain the record of the results of each review until the Commission no longer has certification authority."

10 CFR 76.91—"The Corporation shall establish, maintain, and be prepared to follow a written emergency plan. The emergency plan submitted under § 76.35(d) must include the following information. . . ."

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

10 CFR 76.121(b)—"(b) The Corporation shall make available to the Commission for inspection records kept pertaining to receipt, possession, use, acquisition, import, export, or transfer of radioactive material."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report

5. Safety Programs

5.1 Environmental Protection—Radiological

5.1.2 Environmental Monitoring Program Description [Rev. A4, 3/31/95]

"Effluent data are provided in the Paducah Environmental Compliance Status Report."

5.1.3 Methods of Evaluation and Demonstration of Compliance
5.1.3.3 Radionuclide Effluent Data [Rev. A4, 3/31/95]

"Radionuclide effluent data are summarized in the Paducah Environmental Compliance Status Report."

5.2 Nuclear Criticality Safety
5.2.2 Program Elements
5.2.2.2 Process Evaluation and Approval [Rev. A1, 3/29/95]

"Each completed NCSA is issued as a controlled document. All completed NCSEs and NCSAs are archived and retrievable as permanent quality records in accordance with the plant records management system."

5.2.2.8 Operation Surveillance and Assessment [Rev. A1, 3/29/95]

"Surveillances of the plant's implementation of NCS conditions and controls are performed. . . . Identified deficiencies are documented. . . ."

5.3 Radiation Protection
5.3.1 Radiation Protection Program
5.3.1.3 Radiation Protection Program Elements [Rev. A1, 3/31/95]

"The RP Program includes the following elements: 1. An RP manual which defines the RP and ALARA Programs; 2. Approved, written, and controlled procedures which implement the RP Program; . . . 11. Record keeping."

5.3.1.4 Radiological Protection Procedures [Rev. A1, 3/31/95]

"USEC maintains a *Radiological Protection Manual*. . . . The *Radiological Protection Manual* is reviewed annually. Approved, written procedures are prepared and issued to implement the manual. These procedures are made available to appropriate personnel at the plant as described in Section 6.5. Technical work documents, such as procedures, work packages, or job and research plans, are developed to control hands-on work with radioactive materials. Technical work documents used to specify radiological control requirements are reviewed and approved by the Health Physics Organization. Radiological Control Hold Points are incorporated into technical work documents, as appropriate."

5.3.2 Personnel Exposure Control and Measurement
5.3.2.2 Radiation Exposure [Rev. A1, 3/31/95]

"The established personnel monitoring program consists of the following: . . . . 3. Analysis of personnel occupational exposure and maintenance of exposure records."

5.3.2.5 Radiological Surveys [Rev. A1, 3/31/95]

"The routine survey program is periodically reviewed by Health Physics, documented, maintained, and modified to reflect changes in radiological conditions. . . ."

5.3.2.7 Respiratory Protection [Rev. A1, 3/31/95]

"Paducah has a written policy statement on respirator usage. . . . Respiratory radiological protection requirements are specified in RWPs or procedures."

5.3.5 Radiological Protection Instruments and Equipment [Rev. A1, 3/31/95]

"4. Calibration sources and equipment will have documented traceability links to the National Institute of Standards and Technology."

5.3.6 Records and Reports [Rev. A1, 3/31/95]

"Radiological protection records ... are maintained in the form required by 10 CFR 20.2110 and are retained as required by 10 CFR 20.2101 through 20.2106. Section 6.8 provides additional information on the USEC Records Management and Document Control Program."

Source: Safety Analysis Report
6. Organization and Operating Programs
6.2 Plant Operations Review Committee (PORC)
6.2.1 Purpose [Rev. A2, 3/31/95]

"The PORC is a multi-discipline committee that provides review and approval, as appropriate, of changes to the plant or to the plant's operations as described in the safety analysis report."

6.2.4 Records [Rev. A2, 3/31/95]

"Meeting minutes and review documentation are records which are maintained until the end of the duration of the lease."

6.3 Training [Rev. A1, 3/31/95]

"The training organization, together with line management, develops a description of each organization's training requirements. Records are maintained for employees satisfying these requirements, thus ensuring effective implementation and control of training activities."

6.3.8 Training Program Administration
6.3.8.3 Maintenance of Training Records [Rev. A1, 3/31/95]

"Training attendance records, examinations, employee qualification records, and program records are maintained in an accurate, auditable manner to document each employee's training."

6.4 Operating Procedures
6.4.2 Procedures Program
6.4.2.3 Procedure Control and Distribution [Rev. A1, 3/31/95]

"The procedures control and distribution process assures that up-to-date, approved procedures are available for use by plant personnel, as required. Under this process, copies

of approved procedures are controlled by the document control organization. These controlled copies are distributed, along with a receipt/acknowledgement transmittal, exclusively to designated controlled procedure manual holders. Controlled procedures are stamped "Controlled Copy" in red ink on the title page. Working copies are so stamped and may be used for 10 days after the date issued. Inventories of controlled procedures manuals are conducted annually. The document control organization maintains a list of designated holders of distributed copies of controlled procedure manuals. Approved procedures are maintained in electronic or hard copy format. Approved procedures are available for use by plant personnel through the document control organization, an electronic database, or the designated controlled procedure manual holders."

6.4.2.6 Records [Rev. A1, 3/31/95]

"Records documenting the development and distribution of procedures are maintained as specified in governing procedures. The record copy of procedures and changes is transmitted to and maintained by Records Management."

6.6 Event Investigations and Reporting
6.6.2 Scope
6.6.2.4 Event Investigation [Rev. A2, 3/29/95]

"An investigation is conducted of each reportable event. . . . Documentation related to the event, including investigative documents, is retained in accordance with established record keeping practices."

6.7 Records Management and Document Control [Rev. A1, 3/29/95]

"Records Management and Document Control programs have been established to ensure records related to nuclear safety and safeguards and security are appropriately managed and controlled. These programs are designed to meet the specific record keeping requirements set forth in 10 CFR 76 and the applicable provisions of other parts of Title 10 of the CFR. The principle elements of each of these programs and a brief description of the manner in which the functions associated with each element are performed, are provided below, along with a list of the types of health and safety records that will be retained for the duration of the NRC Certification of Compliance for the plant."

6.7.1 Records Management Program Elements [Rev. A1, 3/29/95]

"The records management program provides direction to the plant organization for the generation, handling, transmittal, storage and retrievability of records important to nuclear safety, safeguards and security. This program is implemented through procedures which provide guidance on the following program elements."

6.7.2 Document Control Program Elements [Rev. A1, 3/29/95]

"The document control program provides direction to the plant organization for the generation, handling, transmittal and storage of documents important to nuclear safety, safeguards and security. This program is implemented through procedures which provide guidance on the following program elements."

6.8 Changes in Facilities and Equipment (Configuration Management)
6.8.4 Records of Plant Changes [Rev. A1, 3/15/95]

"Records of changes described in this section including their safety analyses and documentation are maintained in accordance with 10 CFR 76.68(c) and as described in Section 6.7."

Source: Technical Safety Requirements for Paducah Gaseous Diffusion Plant
3.0 Administrative Controls
3.2 Organization
3.2.1 Onsite and Offsite [Rev. A2, 3/31/95]

"a. Lines of authority, responsibility, and communications are established and defined for the highest management levels through intermediate levels to include operating organization positions. These relationships are documented and updated, as appropriate, in the form of organizational charts, functional descriptions of department responsibilities and relationships, and job descriptions for key personnel positions. This organization is documented in Chapter 6 of the SAR."

3.6 Procedures and Safety Topics
3.6.1 Procedures [Rev. A2, 3/31/95]

"Written standard operating and emergency response procedures are established and maintained to implement the safety topics discussed in section 3.6.2 and to ensure the accident analysis assumptions remain valid. These procedures are reviewed and updated according to procedure management guidelines."

Source: Fundamental Nuclear Materials Control Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky
1. Performance Objectives
1.1 Maintain Accurate, Current, and Reliable Information of and Periodically Confirm the Quantities and Locations of Source Material and Special Nuclear Material in USEC's Possession [Rev. A0, 1/10/95]

(Proprietary Information—See Appendix)

Source: Fundamental Nuclear Materials Control Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky
2. Organization
2.2 Facility Organization
2.2.2 Custodianship of SM and SNM [Rev. A0, 1/10/95]

(Proprietary Information—See Appendix)

Source: Fundamental Nuclear Materials Control Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky
3. Procedures [Rev. A0, 1/10/95]

(Proprietary Information—See Appendix)

Source: Fundamental Nuclear Materials Control Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky
13. Recordkeeping [Rev. A0, 1/10/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Security Plan for the Protection of Classified Matter [Rev. A1, 3/29/95]

(Proprietary Information—See Appendix)

Source: Paducah Gaseous Diffusion Plant Emergency Plan
7. Maintaining Emergency Preparedness Capability
7.1 Written Emergency Plan and Procedures [Rev. A1, 3/21/95]

"EPIPs [Emergency Plan Implementing Procedures] are revised, reviewed, approved, controlled, and distributed in accordance with plant administrative procedure requirements."

7.2 Training [Rev. A1, 3/21/95]

"A formal training record retention program has been established and is maintained for ERO [Emergency Response Organization] members, support personnel, and off-site agency response organizations. Evaluation records for each course are maintained for incorporation into upgrades of the program."

7.3 Drills and Exercises [Rev. A1, 3/21/95]

"Members of the ERO participate in drills and exercises. This requirement is met if the activated personnel of the ERO respond to an emergency and response objectives are met, records are kept, and a critique is performed. . . . Drills are conducted and critiqued . . . . Each is followed by a documented critique to identify areas for improvement."

7.5 Program Audit [Rev. A1, 3/21/95]

"The Emergency Management Program is audited annually. . . . The scope of the audit includes the Plan and the EPIPs . . . and those records associated with off-site support agency interface. . . . Procedures require that the audited organization investigate adverse audit findings, . . . and notify the appropriate organization in writing of the actions taken or planned."

7.6 Maintenance and Inventory of Emergency Equipment, Instrumentation, and Supplies [Rev. A1, 3/21/95]

"A summary report of each inventory and inspection is prepared and submitted as Emergency Management Department documentation."

Source: Paducah Gaseous Diffusion Plant Emergency Plan
8. Records and Reports
8.1 Records of Incidents [Rev. A1, 3/21/95]

"Event documentation includes. . . . The PSS is responsible for reporting and recording. . . . Records unique to a radiological emergency are retained until the certificate is terminated."

8.2 Records of Preparedness Assurance [Rev. A1, 3/21/95]

"Records are retained and maintained to document readiness assurance. These records include the following: . . . ."

Source: Quality Assurance Program
2. Requirements
2.2 Quality Assurance Program
2.2.3 Program Implementation [Rev. A0, 1/20/95]

"This QAP is implemented through policies, procedures, instructions, specifications, drawings, procurement documents, contractual documents, and other documents. Provisions are established to ensure that these documents are consistent with this QAP, the Safety Analysis Report, the Technical Safety Requirements document, and regulatory requirements. These documents also provide measures which ensure that activities within the scope of the QAP are planned and accomplished under suitably controlled conditions as necessary to accomplish the goals and objectives of this QAP. . . . To the extent that such activities are not being performed at the Paducah plant, the described procedures or other controls may not yet be in place. However, as described in this QAP, such activities will not be conducted until the relevant QAP required procedures or controls are in place."

2.2.4 Indoctrination and Training [Rev. A0, 1/20/95]

"Training sessions are documented as to objective, content of the session, attendees, and date of attendance. . . . Training records for nondestructive examiners, auditors, and inspection personnel delineate the specific activities those personnel are qualified to perform, and the criteria used to qualify personnel in each activity."

2.3 Design Change Control
2.3.1 General [Rev. A0, 1/20/95]

"These requirements and controls ensure that . . . design requirements such as design bases, regulatory requirements and appropriate quality standards are correctly translated into design output, procurement and procedural documents. These controls also establish provisions for verifying or checking the technical adequacy of design documents including computer codes."

2.3.3 Requirements
2.3.3.5 Design Documentation and Records [Rev. A0, 1/20/95]

"Design documentation and records that provide evidence that the design and design verification processes were performed in accordance with this section, are collected, stored, and maintained in accordance with Section 2.17."

2.4 Procurement Document Control
2.4.1 General [Rev. A0, 1/20/95]

"A procurement document control system is established for Class I items, and related activities and services within the scope of this QAP as identified in Section 2.2. The procurement document control system is based on ASME NQA-1-1989, Basic Requirement 4, and the requirements of this section. The procurement document control system ensures that applicable regulatory requirements, technical requirements, and QAP requirements are included or referenced in procurement documents for the procurement of items and services. This system also establishes provisions for the preparation, review, approval, and control of procurement documents, including changes thereto."

2.5 Instructions, Procedures, and Drawings
2.5.1 General [Rev. A0, 1/20/95]

"The requirements for instructions, procedures, and drawings are applied to Class I items, and related activities and services within the scope of this QAP as described in Section 2.2, are based on ASME NQA-1-1989, Basic Requirement 5, and this section. Measures are in place to ensure that activities affecting quality are prescribed by documented procedures, drawings, and instructions, as appropriate, and are accomplished in accordance with these documents. These documents also include quantitative and qualitative acceptance criteria to ensure that important operations have been satisfactorily accomplished."

2.6 Document Control
2.6.1 General [Rev. A0, 1/20/95]

"A document control system is established for Class I items, and related activities and services within the scope of the QAP as discussed in Section 2.2. The document control system is based on ASME NQA-1-1989, Basic Requirement 6, and this section. This system ensures that documents defining the performance of quality-related activities are controlled so only current and correct information is available at the location where the activity is performed prior to commencing the work."

2.7 Control of Purchased Items and Services
2.7.3 Requirements
2.7.3.2 Supplier Evaluation [Rev. A0, 1/20/95]

"Activities performed to verify conformance to requirements of procurement documents such as source surveillances and inspections, audits, receiving inspections, nonconformances, dispositions, and corrective actions are documented and/or recorded in accordance with applicable procedures."

2.7.3.3 Control of Supplier Documents and Changes to Procurement Documents [Rev. A0, 1/20/95]

"Procedures are established to determine the acceptability of supplier-generated documents. These measures assure that submittal of these documents is accomplished as required by the procurement documents. These procedures provide measures for the acquisition, processing, and recorded evaluation of technical, inspection, and test data against acceptance criteria. Procedures also are established for the control and documentation of changes to procurement documents. The requirements of Section 2.4.3 are followed when changes to procurement documents are made."

2.7.3.6 Control of Supplier Nonconformances [Rev. A0, 1/20/95]

"[P]rocedures contain the provisions for the following: . . . 5. Maintenance of records of supplier submitted nonconformances."

2.8 Identification and Control of Items
2.8.3 Requirements
2.8.3.4 Maintaining Identification of Stored Items [Rev. A0, 1/20/95]

"Procedures are established for maintenance or replacement of identification, markings, and records for stored items. The procedures also provide for the protection of identification of items subject to excessive deterioration due to environmental exposure and for updating existing plant records."

2.9 Control of Processes
2.9.3 Requirements
2.9.3.3 Records [Rev. A0, 1/20/95]

"Procedures are established to ensure that qualification records of procedures, equipment, and personnel associated with special processes are maintained, filed, and kept current in accordance with the requirements of Section 2.17."

2.10 Inspection
2.10.3 Requirements [Rev. A0, 1/20/95]

"Procedures are established or governing the inspection of items and activities to ensure the following: . . . (7) Inspections of items or activities are documented. The documentation identifies the characteristics, methods, and acceptance criteria, and provides for the recording of the objective evidence of the inspection results. (8) Where a sample is used to verify acceptability of a group of items, the sampling procedure is documented and clearly identifies the sampling basis (typically based on recognized standards)."

2.11 Test Control
2.11.1 General [Rev. A0, 1/20/95]

"A system for test control is established for Class I items within the scope of this QAP. . . . The system requires written test procedures identifying prerequisites with provisions for documenting and evaluating test results to assure that requirements are satisfied."

2.11.3 Requirements
2.11.3.1 Test Control [Rev. A0, 1/20/95]

"Procedures are established for the control of testing activities that provide measures that ensure the following: (1) Test requirements and acceptance criteria are based upon specified requirements contained in pertinent technical documents. (2) Test procedures contain the following information as appropriate to the test: . . . . (e) Provisions for documenting and evaluating the test results. (3) Test records contain the following information as a minimum. . . ."

2.11.3.2 Computer Program Testing [Rev. A0, 1/20/95]

"Procedures are established to provide measures to ensure the following. . . 3. Test requirements and acceptance criteria are based upon applicable design or other pertinent technical documents. . . . (6) Test procedures or plans specify the following as applicable: . . . records of test results to be generated . . . (7) Verification test records . . . (8) Operational test results records . . ."

2.12 Control of Measuring and Test Equipment
2.12.3 Requirements [Rev. A0, 1/20/95]

"Procedures are established for the control of measuring and test equipment that provide measures that ensure the following: (1) A list of devices (and their assigned locations) is established to identify those items within the calibration control system. . . . (5) Records are maintained and equipment is suitably marked to indicate its calibration status."

2.15 Control of Nonconforming Items
2.15.3 Requirements [Rev. A0, 1/20/95]

"Procedures are established . . . which ensure the following: . . . (7) The disposition of nonconforming items is identified and documented. Technical justification for the acceptability of nonconforming items dispositioned repair or use-as-is are also documented. (8) Nonconformances to design requirements dispositions use-as-is or repair are subject to design control measures as described in Section 2.3. The as-built records, if such records are required, reflect the accepted deviation. This as-built requirement applies only to those as-built conditions captured after the effective date of this QAP."

2.16 Corrective Action
2.16.1 General [Rev. A0, 1/20/95]

"A corrective action system is established for those Class I items, and related activities and services within the scope of the QAP as described in Section 2.2. . . . This system establishes measures which ensure that conditions adverse to quality are identified and corrected as soon as practical. The system also ensures that, in the case of significant conditions adverse to quality, the cause of the condition is determined, and corrective action is taken to preclude recurrence. These actions are documented and reported to appropriate levels of management."

2.16.2 Responsibilities [Rev. A0, 1/20/95]

"Division/department managers are responsible for . . . assuring the identification and documentation of conditions adverse to quality in accordance with applicable procedures."

2.16.3 Requirements [Rev. A0, 1/20/95]

"Procedures for the corrective action process are established to provide measures that ensure the following. . . . (3) The identification, cause, and corrective action for significant conditions adverse to quality are documented and reported to appropriate levels of management. . . ."

2.17 Quality Assurance Records
2.17.1 General [Rev. A0, 1/20/95]

"A records management system is established for Class I items, and related activities and services within the scope of this QAP as described in Section 2.2. The records management system is based on ASME NQA-1-1989, Basic Requirement 17 and this section. The records management system provides measures to control quality assurance records."

2.17.2 Responsibilities [Rev. A0, 1/20/95]

"The Division Manager—Human Resources is responsible for the development, maintenance, and implementation of the records control system consistent with the requirements set forth in this section of the QAP. Division/department managers are responsible for . . ."

2.17.3 Requirements [Rev. A0, 1/20/95]

"Procedures for the identification an control of quality assurance records are established. . . ."

2.18 Audits
2.18.2 Responsibilities [Rev. A0, 1/20/95]

"Audited organizations are responsible for . . . providing access to facilities, personnel, documents, and records, as required. . . ."

2.18.3 Requirements
2.18.3.7 Response and Follow-Up Action [Rev. A0, 1/20/95]

"1. Procedures establish measures to require that the management of the audited organization or activity investigate adverse audit findings, identify and schedule corrective action, identify and schedule measures to prevent recurrence, and notify other appropriate organizations in writing of the actions taken or planned."

2.19 Quality Program for Class II SSCs [Rev. A0, 1/20/95]

"Class II items and activities are not subject to the full scope of the QAP described in Sections 2.3 through 2.18 above. As described below, Class II SSCs are subject to controls commensurate with those used in the past which have provided adequate levels of quality. . . . (2) Personnel are indoctrinated and trained in the operation and maintenance of Class II systems. . . . The training is documented. . . . (4) Appropriate document controls are established to ensure proper changes and prevent use of incorrect or superseded documents. . . . (8) Inspections are performed. . . . Inspection results are documented. (9) [F]unctional verification tests are . . . documented. . . . (12) Corrective actions for significant conditions adverse to quality in Class II items and related activities are documented. . . . (13) Legible, retrievable records are maintained for Class II items and related activities. They are guarded against damage, deterioration and loss."

Source: Radioactive Waste Management Plan
5. Waste Management
5.2 Radioactive Waste Storage [Rev. A3, 3/13/95]

"When near-term treatment/disposal of USEC-generated mixed wastes is not an option, these are transferred to DOE-owned and operated facilities for storage until treatment and/or disposal can be accomplished. Such transfers are documented."

5.5 Waste Disposal [Rev. A3, 3/23/95]

"Copies of the disposal site license are retained in accordance with 10 CFR 76.83. . . . Waste disposal records are retained in accordance with 10 CFR 20.2108."

DESCRIPTION OF NONCOMPLIANCE

Development of improved, centralized records management and document control programs, including development and implementation of administrative and technical procedures has not been completed. These procedures will be required to include the administrative controls and technical requirements described in the application for NRC certification in order to comply with the requirements in 10 CFR 76 and the other regulations listed in 10 CFR 76.60. The appropriate personnel have not been trained in these new program requirements. In addition, legacy records and documents that may be required to support operating decisions and to evaluate proposed changes may not be fully or readily retrievable as a result of differences between the current requirements and the standards under which the past records were created.

JUSTIFICATION FOR CONTINUED OPERATION

Records management and document control program requirements and standards have evolved significantly over the 40-year life of the facility. For much of the life of the plant, there were no specific requirements to maintain and control some of the types of records and documents identified by 10 CFR 76 and other applicable parts of 10 CFR. Therefore, many of those records and documents were not maintained by the facility in retrievable form. However, a number of records and documents have been retrieved over the last two years as a part of the Nuclear Safety Upgrade Projects and the development of the application for NRC certification. When necessary, design records and documents are being updated to reflect the as-built conditions found during the validation of the plant procedures, plant drawings, and analysis documents supporting the Safety Analysis Report and other portions of the application for NRC certification. The records and documents to demonstrate that the facility can be operated and controlled within the operational envelopes specified by the application for NRC certification are either retrievable or have been recreated. When legacy records and documents that have neither been retrieved nor updated to as-built conditions are needed for the evaluation of proposed plant changes pursuant to 10 CFR 76.68, these records and documents will then be retrieved, updated, or recreated.

The current records management and document control programs, including administrative procedures and technical procedures, implement Regulatory Oversight Agreement (ROA) requirements 3.2.2.5 and 3.6.2.4. These programs provide the necessary

controls for (1) establishing administrative controls for providing standard methods and requirements for creating, collecting, maintaining, and disposing of records related to nuclear safety, safeguards, and security; (2) establishing administrative controls for ensuring documents are prepared, reviewed, approved, issued, used, and revised to describe processes, specify requirements, and establish designs for items that can impact public health and safety; and (3) ensuring related records are identified, prepared, reviewed, approved, and maintained.

An analysis has demonstrated that the differences between the ROA and 10 CFR 76 are largely administrative and have no significant effect on nuclear safety, safeguards, and security. Thus, the administrative noncompliances resulting from differences between the ROA and the 10 CFR 76 requirements in combination with the commitments in the application for NRC certification will not have any significant effect on nuclear safety, safeguards, and security.

PLAN OF ACTION AND SCHEDULE

The current records management and document control programs will be upgraded to identify, manage, and control records and documents within the scope of the Quality Assurance Program as well as all other records and documents specifically required to be identified, managed, and controlled in accordance with the requirements of 10 CFR 76 and the other applicable requirements of 10 CFR. The scheduled completion date for this plan of action is January 31, 1996.

The procedure upgrades and associated training required to address this area of noncompliance will be completed consistent with the plan of action and schedule of the compliance plan item entitled "Procedures Program." The scheduled completion date for the overall procedure upgrades and associated training is December 31, 1996.

Configuration Management Program Implementation

REQUIREMENTS

10 CFR 76.68—"(a) The Corporation may make changes to the plant or to the plant's operations as described in the safety analysis report without prior Commission approval provided all the provisions of this section are met:

(1) The Corporation shall conduct a written safety analysis which demonstrates that the changes would not result in undue risk to public health and safety, the common defense and security, or to the environment.

(2) The changes must be authorized by responsible management and approved by a safety review committee.

(3) The changes may not decrease effectiveness of the plant's safety, safeguards, and security programs.

(4) The changes may not involve a change in any condition to the certificate of compliance.

(5) The changes may not involve a change to any condition to the approved compliance plan.

(6) The changes may not involve an unreviewed safety question.

(b) To ensure that the approved application remains current with respect to the actual site description and that the plant's programs, plans, policies, and operations are in place, the Corporation shall submit revised pages to the approved application and safety analysis report, marked and dated to indicate each change. The Corporation shall evaluate any as-found conditions that do not agree with the plant's programs, plans, policies, and operations in accordance with paragraph (a) of this section. These revisions must be submitted annually as specified in § 76.36 of this part or at a shorter interval as may be specified in the certificate.

(c) The Corporation shall maintain records of changes in the plant and of changes in the programs, plans, policies, procedures and operations described in the approved application, and copies of the safety analyses on which the changes were based. The records of plant changes must be retained until the end of the duration of the lease. The records of changes in programs, plans, policies, procedures, and operations and copies of the safety analyses on which the changes were based must be retained for a period of 2 years.

(d) The Corporation may at any time apply under § 76.45 for amendment of the certificate to cover proposed new or modified activities not permitted by paragraph (a) of this section."

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives

to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Safety Analysis Report
6. Organization and Operating Programs
6.8 Changes in Facilities and Equipment (Configuration Management)
[Rev. A1, 3/15/95]

"In accordance with 10 CFR 76.68, USEC is permitted to make changes to the plant or to the plant's operations as described in the safety analysis report in accordance with specified requirements. In addition, USEC may apply for amendments to any certificate of compliance in accordance with 10 CFR 76.45, and may modify programs and plans in accordance with the criteria set forth in this application. This section describes the mechanisms utilized to provide for control and approval of such changes."

Source: Quality Assurance Program
2. Requirements
2.3 Design Change Control
2.3.1 General [Rev. A0, 1/20/95]

"A design change control system is established for Class I items, and related activities and services within the scope of this QAP as identified in Section 2.2. This system is based on ASME NQA-1, 1989, Basic Requirement 3, and the requirements of this section. These requirements and controls ensure that new design and design change activities are carried out in a planned, controlled, and orderly manner, and that design requirements such as design bases, regulatory requirements and appropriate quality standards are correctly translated into design output, procurement and procedural documents. These controls also establish provisions for verifying or checking the technical adequacy of design documents including computer codes. They also provide for the control of design changes."

Source: Quality Assurance Program
2. Requirements
2.19 Quality Program for Class II SSCs [Rev. A0, 1/20/95]

"Class II items and activities are not subject to the full scope of the QAP described in Sections 2.3 through 2.18 above. As described below, Class II SSCs are subject to controls commensurate with those used in the past which have provided adequate levels of quality. . . .

5. Changes to the current configuration are reviewed and approved prior to making modifications."

DESCRIPTION OF NONCOMPLIANCE

A formal, integrated, and comprehensive Configuration Management Program and Change Control Process meeting the requirements of 10 CFR 76.68 and 10 CFR 76.93 has not been fully developed and implemented. Some of the Configuration Management policies,

program plans, procedures, and training needed to ensure proper control and documentation of changes to the plant's configuration (physical configuration, functional requirements, and associated documentation) for Class I and Class II structures, systems, and components (SSCs) are not yet fully developed and implemented.

JUSTIFICATION FOR CONTINUED OPERATION

The plant has maintained elements of "Configuration Management" since initial plant operation. Various plant procedures provide a measure of control for changes to the configuration of the major plant process systems and equipment. These procedures have been updated to include requirements to review design and procedure changes for identification and resolution of any unreviewed safety questions. These reviews are required for changes associated with both safety and non-safety systems.

Specifically, the procedure controlling requests for engineering services requires a project safety review for proposed modifications, additions, or changes to the design bases of the plant facilities or configuration. The project safety review consists of an unreviewed safety question screening and a preliminary hazard screening. The screenings determine if any additional safety analysis is required.

Similarly, the procedure controlling the development and revision of procedures requires an unreviewed safety question screening for procedures. For safety significant procedures, an independent verification of the screening is performed. The screening determines if additional safety evaluation is required.

Efforts to develop and implement an improved Configuration Management Program and Change Control Process are ongoing, and a schedule for full implementation has been developed. The schedule priorities were established using a graded approach consistent with the Quality Assurance Plan. As a result, actions with the greatest potential for increasing the safety of the plant are completed first. For example, full implementation of the Configuration Management Program for Class I SSCs is scheduled to be completed before Class II SSCs. Further, activities within each Class are prioritized such that those with the most significant safety improvement potential are performed first.

Consistent with the schedule, a Level 2 Configuration Management Program Procedure which includes the Change Control Process requirements has been developed and issued. This procedure provides management direction, establishes consistent concepts and terminology, defines the scope of the program, identifies key roles, responsibilities, and organizational and programmatic interfaces, and provides a foundation for lower level implementing procedures. The Change Control Process requirements ensure that changes to Class I and Class II SSCs are properly identified, reviewed, approved, documented, and implemented to maintain consistency among the physical configuration, the functional requirements, and associated documentation. An initial indoctrination briefing on this Configuration Management Program has been provided to senior plant management and key discipline personnel responsible for implementing, identifying, and controlling changes.

To ensure configuration control of the liquid UF_6 Class I SSCs, the following actions have been taken:

1. establishing and documenting the existing Class I system boundaries and system components that are required for the system to operate as designed and to perform its intended safety function,

2. directing the maintenance group to ensure that changes to the SSCs within Class I system boundaries are properly identified and controlled, and

3. requiring maintenance personnel to obtain engineering assistance when planning to perform any work other than "like for like" replacement on these Class I systems and components.

The above justification provides sufficient confidence that the plant can continue to operate safely until the improved Configuration Management Program and Change Control Process is fully developed and implemented.

PLAN OF ACTION AND SCHEDULE

The actions to implement the Configuration Management Program and Change Control Process are as follows:

1. Complete identification of the Class I and Class II SSCs consistent with the definitions provided in the application for certification.

2. Retrieve or develop verified and approved documentation, including as-built drawings, which reflect the physical configuration and the requirements for the Class I and Class II SSCs. This action will be accomplished consistent with the level of detail necessary to satisfy the Configuration Management and Change Control Process requirements established for the Class I and Class II SSCs.

3. Provide training on the Configuration Management Program procedures, including the change control process requirements, to plant management and personnel who are relied upon to operate, maintain, or modify the plant in a safe manner. The purpose of this training is to develop a working knowledge of the important concepts, terminology, and requirements.

The scheduled completion dates for implementing the Configuration Management Program and Change Control Process are October 1, 1995, for Class I SSCs and July 1, 1996, for Class II SSCs.

III. Fundamental Nuclear Material Control Plan Noncompliances

See Appendix

IV. Physical Security Plans Noncompliances

No Issues Identified

V. Emergency Preparedness Plan Noncompliances

Public Warning Sirens and Controls

REQUIREMENT

10 CFR 76.91(h)—"Notification and coordination. A commitment to and a brief description of the means to promptly notify offsite response organizations . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Emergency Plan

6. Emergency Response Equipment and Facilities
   6.2 Communications Equipment [Rev. A1, 3/21/95]

"The communications systems in place include the following: . . .

11. Public Warning System."

DESCRIPTION OF NONCOMPLIANCE

The existing outdoor warning sirens do not provide total coverage within a two-mile radius of the plant and are not sufficiently reliable.

JUSTIFICATION FOR CONTINUED OPERATION

The siren system is tested daily and supported by a high-priority preventive maintenance program to mitigate the system reliability problems. In addition, an alternate public warning system (the emergency broadcast system message) is available and functioning.

PLAN OF ACTION AND SCHEDULE

The three existing sirens will be replaced with a new siren system to enhance reliability and coverage. An analysis of the number, capabilities, and coverage of the new sirens will be performed, and a new system will be installed by November 30, 1996.

Public Address System

REQUIREMENT

10 CFR 76.91(e)—"Mitigation of consequences. A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Emergency Plan

6. Emergency Response Equipment and Facilities

6.2 Communications Equipment

6.2.1.2 PA (Public Address) System [Rev. A1, 3/21/95]

"A PA system is in place with the capability to cover most occupied site buildings. During emergencies, the system is not used for routine traffic. The system is tested daily."

DESCRIPTION OF NONCOMPLIANCE

The existing public address system covers most buildings on the site which are routinely occupied by plant personnel. The system coverage does not provide sufficient assurance that on-site personnel can be fully notified of immediate protective action recommendations when required. In addition, system reliability problems have contributed to the need for system improvements.

JUSTIFICATION FOR CONTINUED OPERATION

The existing public address system is augmented by the plant radio system and telephones to ensure prompt notification of plant personnel until system modifications are completed. A daily operability check of the interior public address system is conducted, and weekly checks of outside speakers are performed. Previous plant accountability drills have demonstrated that plant personnel are informed of plant events and receive proper notification and instructions in the event of an emergency. The planned system changes will improve the timeliness of such notifications.

PLAN OF ACTION AND SCHEDULE

The existing public address system and the central public address switching console, speakers, and amplifiers will be upgraded to provide full plant coverage, improved reliability, and additional expansion capabilities. The scheduled completion date for this plan of action is April 30, 1997.

Emergency Plan Support Documents

REQUIREMENT

10 CFR 76.91(m)—"The Corporation shall establish, maintain, and be prepared to follow a written emergency plan. . . . (m) Hazardous chemicals. Confirmation that the Corporation has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, if applicable to the Corporation's activities at the proposed place of use of the special nuclear material . . ."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Emergency Plan

Plan Summary [Rev. A1, 3/22/95]

"[T]he United States Enrichment Corporation (USEC) has established and shall maintain and be prepared to follow the Paducah Gaseous Diffusion Plant (PGDP) Emergency Plan. . . ."

7. Maintaining Emergency Preparedness Capability
   7.1 Written Emergency Plan and Procedures [Rev. A1, 3/21/95]

"The Emergency Management Department is responsible for maintaining and updating the plan, as appropriate, on an annual basis, in support of the annual application for renewal of the certificate of compliance. . . . EPIPs [Emergency Plan Implementing Procedures] are revised, reviewed, approved, controlled, and distributed in accordance with plant administrative procedure requirements. The revisions of the procedures incorporate required changes to correct deficiencies identified in emergencies, training, drills, or exercises."

DESCRIPTION OF NONCOMPLIANCE

Some Emergency Plan support documents need to be reviewed and updated as appropriate. These documents include those associated with the Emergency Planning and the Community Right-To-Know Act of 1986, Title III, Pub. L. 99-499, and the Hazard and Consequence Assessment.

JUSTIFICATION FOR CONTINUED OPERATION

The Emergency Plan has been revised to meet the requirements of 10 CFR 76.91, and most of the plan's supporting documents are in place. The remaining work involves bringing the documents into full compliance with 10 CFR 76.91(m), hazardous chemical requirements. The existing program is an effective emergency response program, and it will continue to provide adequate protection for PGDP until the remaining support documents are revised.

PLAN OF ACTION AND SCHEDULE

The emergency plan support documents will be upgraded to meet the 10 CFR 76.91 requirements. The scheduled completion date for this plan of action is April 30, 1996.

Training for Emergency Response Organization

REQUIREMENT

10 CFR 76.91(j)—"Training . . . The training must also prepare site personnel for their responsibilities for the accident scenarios postulated as most probable for the specific site, including the use of team training for these accident scenarios."

COMMITMENT AS STATED IN THE APPLICATION

Source: Emergency Plan

7. Maintaining Emergency Preparedness Capability
   7.2 Training
      7.2.2 Specialized Emergency Plan Training for the Emergency Response Organization (ERO) [Rev. A1, 3/21/95]

"A formal training program has been developed for the ERO and support personnel which includes classroom-type training (lectures, seminars), practical applications (tabletop drills, functional drills, and exercises), and self-study programs."

DESCRIPTION OF NONCOMPLIANCE

Because the Emergency Plan has been revised and procedures have been added and revised, additional training on the changes to the plan is required for emergency response personnel. The training has not been fully developed and delivered.

JUSTIFICATION FOR CONTINUED OPERATION

The emergency response personnel are trained in the duties described in the existing Emergency Plan and supporting documents. Additional training is needed to improve their level of knowledge and skill on the 10 CFR 76.91(j) hazardous material response. The current level of training is sufficient to protect the health and safety of the public even though it does not include the specific requirements of 10 CFR 76.91(j).

PLAN OF ACTION AND SCHEDULE

Hazardous material response training will be given to emergency response personnel who need it. The scheduled completion date for this plan of action is April 30, 1996.

VI. Quality Assurance Program Noncompliances

Management Assessment

REQUIREMENT

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

COMMITMENT AS STATED IN THE APPLICATION

Source: Quality Assurance Program
2. Requirements
2.2 Quality Assurance Program
2.2.5 Review and Assessment [Rev. A0, 1/20/95]

"Management of those organizations implementing this QAP, or portions thereof, shall regularly assess the adequacy of that part of the program for which they are responsible and shall assure its effective implementation.

An assessment of the implementation and effectiveness of this QAP is conducted through scheduled independent audits, and other regular management assessments. The results of audits and assessments are provided to the Manager—Nuclear Regulatory Assurance and Policy. The status, adequacy, and effectiveness of this QAP is reviewed by the Manager—Nuclear Regulatory Assurance and Policy. The Manager—Nuclear Regulatory Assurance and Policy annually reviews and revises this QAP as necessary. The Manager—Nuclear Regulatory Assurance and Policy also assures that, on an annual basis, an evaluation is performed of the status and the adequacy of the part(s) of the program which are implemented by contracted organizations."

DESCRIPTION OF NONCOMPLIANCE

Management assessments have not been adequately implemented. Management practices in the performance of management assessments have not been adequate.

JUSTIFICATION FOR CONTINUED OPERATION

The use of experienced and qualified coaches to monitor the effectiveness of management assessments will ensure continued operation without degradation of plant functions until incumbent management demonstrates proficiency in the conduct of effective management assessments.

PLAN OF ACTION AND SCHEDULE

Management assessment practices will be improved to include the following:

1. identify management personnel who have responsibility for implementation of the QAP, and

2. coach targeted management personnel in the assessment process.

The scheduled completion date for this plan of action is December 31, 1995.

Procurement

REQUIREMENT

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Quality Assurance Program

2.4 Procurement Document Control

2.4.1 General [Rev. A0, 1/20/95]

"A procurement document control system is established for Class I items, and related activities and services within the scope of this QAP as identified in Section 2.2. The procurement document control system is based on ASME NQA-1-1989, Basic Requirement 4, and the requirements of this section."

2.4.3 Requirements

2.4.3.1 Procurement Document Contents [Rev. A0, 1/20/95]

"Where applicable, procedures governing procurement document content are established to ensure the following: . . .

4. [P]rocurement documents establish the requirements for reporting and approving disposition of nonconforming items and adherence to 10 CFR Part 21 requirements when applicable."

2.7 Control of Purchased Items and Services

2.7.3 Requirements

2.7.3.6 Control of Supplier Nonconformances [Rev. A0, 1/20/95]

"Procedures are established to provide methods for disposition of nonconforming items and services that do not meet procurement documentation requirements. These procedures contain provisions for the following:

1. Evaluation of nonconforming items, which includes adherence to 10 CFR Part 21 requirements."

2.7.3.7 Commercial Grade Items [Rev. A0, 1/20/95]

"Procedures are established governing the application and use of commercial grade items:

1. Methods for determining whether a basic component, as defined in 10 CFR Part 21, can be upgraded or purchased as commercial grade and dedicated for use in a Class I application. A commercial grade item is an item satisfying all of the following: . . . .

3. The criteria for determining the type and depth of product acceptance and the criteria for determining the point of dedication at which time USEC assumes the responsibility for 10 CFR Part 21 reportability requirements."

DESCRIPTION OF NONCOMPLIANCE

A procurement process with provisions for controlling procurement documents, purchased items, and services as described in the Quality Assurance Program (QAP) has not been implemented. Previous audits, inspections, surveillances, and assessments have shown the procurement process to be deficient. Instructions and procedures have not satisfactorily provided for performing procurement planning, procurement document review, procurement of spare or replacement parts or piece parts and subassemblies, control of supplier-generated documents, and receipt inspection.

JUSTIFICATION FOR CONTINUED OPERATION

A Materials Management Division has been established to provide focus and emphasis for the total procurement process, including procurement, receiving, inspection, storage, and issue. Procedures are being established for identification, procurement, inspection, and control of Class I items. Future purchases of Class I items will be controlled through identification of such items in the configuration management program. An independent review of Class I procurement documents will be performed prior to placing orders. When deficiencies are noted, appropriate corrective actions will be taken according to the problem reporting system or control of material deficiencies system. The above actions provide sufficient confidence to operate the plant without degradation to nuclear safety, safeguards, and security until the plan of action is completed.

PLAN OF ACTION AND SCHEDULE

A procurement process will be developed that ensures full flow-down of the requirements of the QAP. The planned actions will include

- identification of the responsibilities of the involved organizations;
- development of procedures to implement the procurement process;
- indoctrination and training of involved personnel; and
- confirmation that the process and implementing procedures work.

The scheduled completion date for this plan of action is December 31, 1996.

Instructions, Procedures, and Drawings

REQUIREMENTS

10 CFR 76.35(d)—"The application for an initial certificate of compliance must include the information identified in this section. . . . (d) A quality assurance program that meets the requirements of § 76.93."

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

COMMITMENT AS STATED IN THE APPLICATION

Source: Quality Assurance Program
2.5 Instructions, Procedures, and Drawings
2.5.1 General [Rev. A0, 1/20/95]

"The requirements of instructions, procedures, and drawings are applied to Class I items, related activities and services within the scope of this QAP as described in Section 2.2, are based on ASME NQA-1-1989, Basic Requirement 5, and this section. Measures are in place to ensure that activities affecting quality are prescribed by documented procedures, drawings, and instructions, as appropriate, and are accomplished in accordance with these documents. These documents also include quantitative and qualitative acceptance criteria to ensure that important operations have been satisfactorily accomplished."

DESCRIPTION OF NONCOMPLIANCE

Not all of the tasks affecting quality have been identified, and instructions and procedures have not been developed and documented for the performance of those tasks and the flow-down of the requirements for those tasks. Some procedures are inconsistent and need upgrading. Other tasks affecting quality are performed by instructions, procedures, and drawings that are not controlled. Measures in place have not previously established all of the activities affecting quality and have not demonstrated the ability to implement the commitments described in the Quality Assurance Program.

JUSTIFICATION FOR CONTINUED OPERATION

PGDP has historically used instructions, procedures, and drawings to control and guide the performance of functions and activities important to safety, production, and regulatory compliance. Operations and activities important to safety are covered by procedures responsive to the 1985 Final Safety Analysis Report, operational safety requirements, and DOE Orders. Recently developed procedures and those being developed are more rigorous

and detailed than the superseded procedures. Since the existing procedures have demonstrated the capability to control and operate the plant safely, continued operation with the controlled phase-in of the new or revised procedures, as provided by the procedures upgrade program, can occur without compromising public health and safety.

PLAN OF ACTION AND SCHEDULE

Instructions, procedures, and drawings will be upgraded to comply with NRC regulations. The upgrade program will include the general areas listed below and will be performed in a documented plan and accomplished without degradation to nuclear safety, safeguards, and security:

1. nuclear-related procedures including operations, maintenance, and handling of enriched uranium;

2. safety-related nuclear criticality procedures;

3. required nuclear safety procedures (technical safety requirements);

4. nuclear-related operational procedures requiring alarm response, abnormal, and/or normal operations;

5. nuclear and/or criticality operations procedures affecting radiation protection, emergency response, safeguards and security, and environmental waste management activities;

6. all instructions, procedures, and drawings for activities that support the above quality-affecting activities and which affect quality; and

7. training in the use of the applicable procedures for those personnel performing work that is controlled by the above instructions, procedures, and drawings.

The scheduled completion date for this plan of action is December 31, 1996.

Nonconforming Items and Corrective Action

REQUIREMENT

10 CFR 76.93—"The Corporation shall establish, maintain, and execute a quality assurance program satisfying each of the applicable requirements of ASME NQA-1-1989, 'Quality Assurance Program Requirements for Nuclear Facilities,' or satisfying acceptable alternatives to the applicable requirements. The Corporation shall execute the criteria in a graded approach to an extent that is commensurate with the importance to safety."

COMMITMENTS AS STATED IN THE APPLICATION

Source: Quality Assurance Program

2.15 Control of Nonconforming Items

2.15.1 General [Rev. A0, 1/20/95]

"A system is established for the control of nonconforming Class I items, related activities and services within the scope of this QAP as described in Section 2.2. This system is based on ASME NQA-1-1989, Basic Requirement 15, and this section. The system establishes the requirements for identification, segregation, disposition, prevention of inadvertent installation or use, documentation and notification to affected organizations for items which do not conform to specified requirements."

2.16 Corrective Action [Rev. A0, 1/20/95]

2.16.1 General [Rev. A0, 1/20/95]

"A corrective action system is established for those Class I items, and related activities and services within the scope of the QAP as described in Section 2.2. This system is based on ASME NQA-1-1989, Basic Requirement 16 and this section. This system establishes measures which ensure that conditions adverse to quality are identified and corrected as soon as practical. The system also ensures that, in the case of significant conditions adverse to quality, the cause of the condition is determined, and corrective action taken to preclude recurrence."

DESCRIPTION OF NONCOMPLIANCE

The nonconformance control and corrective action processes have not been able to fully implement the requirements described in the Quality Control Program (QAP). Previous audits, surveillances, inspections, and assessments have shown that the nonconformance control and corrective action processes were not fully effective in preventing recurrence of nonconforming conditions. Nonconforming item evaluation, root cause determination, identification of corrective actions, implementation of prescribed actions, follow-up of the implementation, and trend analysis need to be improved to close out existing conditions and to prevent their recurrence.

JUSTIFICATION FOR CONTINUED OPERATION

Existing mechanisms, such as the problem reporting procedure, have been able to identify nonconforming conditions. Subsequent steps in the treatment of nonconforming items include formal dispositioning and corrective action. The Management Analysis and Assessment Team (MAAT) provides oversight of this process, including independent review of root cause analysis. The Quality Assurance organization also provides independent oversight, with a graded approach to quality, through the validation and verification of corrective actions using audits and surveillances. These measures, coupled with a commitment to continuous improvement and effective management assessments, provide sufficient confidence that the facility can continue to operate without significant risk to nuclear safety, safeguards, and security.

PLAN OF ACTION AND SCHEDULE

Processes for nonconforming items and corrective actions will be developed to provide

1. a method for identifying and reporting items that do not meet requirements;

2. techniques and the methods for nonconformance evaluation, determination of the significance of the nonconformance, and disposition of the nonconformance;

3. measures for developing corrective actions, verifying proper implementation, and assessing the effectiveness of the corrective action;

4. a tracking system for trending nonconformances and verifying completion of corrective actions; and

5. an appropriate program for training personnel in the affected organizations.

The scheduled completion date for this plan of action is January 31, 1996.

VII. Radioactive Waste Management Program Noncompliances

Quality Control Program for Low-Level Waste Disposal

REQUIREMENTS

10 CFR 20.2006(d)—"(d) Each person involved in the transfer for disposal and disposal of waste, including the waste generator . . . shall comply with the requirements specified in Section III of Appendix F to §§ 20.1001-20.2401."

10 CFR 20, Appendix F to Part 20, Requirements for Low-Level-Waste Transfer for Disposal at Land Disposal Facilities and Manifests, Section III, Control and Tracking, Part A.3—"A licensee shall . . . [c]onduct a quality control program to ensure compliance with §§ 61.55 and 61.56 of this chapter; the program must include management evaluation of audits. . . ."

10 CFR 76.60(d)—"(d) The Corporation shall comply with the applicable provisions of 10 CFR 20. 'Standards for Protection Against Radiation'. . . . (2) The Corporation shall comply with the requirements of this part not later than the date of the Director's decision on the initial certificate of compliance. . . ."

COMMITMENT AS STATED IN THE APPLICATION

Source: Radioactive Waste Management Plan

5.4 Off-Site Waste Shipments [Rev. A3, 3/23/95]

"Off-site shipments of radioactive wastes are manifested in accordance with 10 CFR 20.2006. Waste shipments are packaged, labeled, and manifested in accordance with applicable state, Department of Transportation, NRC, and EPA requirements."

5.5 Waste Disposal [Rev. A3, 3/23/95]

"USEC-generated wastes are disposed of at DOE facilities and/or commercially owned facilities and licensed in accordance with 10 CFR 61 or applicable NRC Agreement State requirements. Wastes are inspected, as appropriate, prior to shipment to verify compliance with applicable packaging and transportation requirements. Copies of the disposal site license are retained in accordance with 10 CFR 76.83.

Waste disposals are in compliance with 10 CFR 20, Subpart K. Waste Disposal records are retained in accordance with 10 CFR 20.2108."

DESCRIPTION OF NONCOMPLIANCE

Some of the required elements of a quality control program to ensure compliance with 10 CFR 61.55 and 10 CFR 61.56 have not been implemented.

JUSTIFICATION FOR CONTINUED OPERATION

The current procedures provide for compliance with applicable DOE Orders and policies. The DOE requirements implemented for disposal of low-level waste are comparable to those required by 10 CFR for the gaseous diffusion plants.

PLAN OF ACTION AND SCHEDULE

A quality control program including all elements necessary to ensure compliance with 10 CFR 61.55 and 10 CFR 61.56 will be implemented by October 24, 1995.

VIII. Depleted Uranium Management Plan Noncompliances

No Issues Identified