



March 7, 2001  
GDP 01-1012

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

**Paducah Gaseous Diffusion Plant (PGDP)**

**Docket No. 70-7001**

**Reply to Inspection Report 070-07001/2001001 Notice of Violation (NOV) 2001001-01**

The subject Inspection Report included a violation for the plant's failure to have an adequate procedure to winterize the plant to ensure that components necessary for safety remained in an operable status. Specifically, the procedure did not include appropriate acceptance criteria for determining that the required activities to prevent the freezing of the High Pressure Fire Water system were accomplished.

This issue was also addressed in PGDP Event Report ER-00-13 (CER 37632) and the corrective actions are basically repeated in the response to this NOV.

If you have any questions regarding this submittal, please contact Larry Jackson at (270) 441-6796.

Sincerely,

Howard Pulley  
General Manager  
Paducah Gaseous Diffusion Plant

Enclosures: As Stated

cc: NRC Regional Administrator, Region III  
NRC Resident Inspector, PGDP

*IAN*

**UNITED STATES ENRICHMENT CORPORATION (USEC)  
REPLY TO NOTICE OF VIOLATION (NOV) 070-07001/2001001-01**

Restatement of Violation

10 CFR 76.93, "Quality Assurance," requires, in part, that the certificatee shall establish and execute a quality assurance program.

Section 2.2.2.b of the Quality Assurance Program (QAP) requires, in part, that the QAP applies to augmented quality (AQ) items to the extent described in Appendix A. Section 2.5 of Appendix A states that Section 2.5 "Instruction, Procedures, and Drawings" of the Q program applies. Section 2.5.3.1 of the Quality Assurance Program requires, in part, that: 1) activities affecting safety or quality are prescribed and performed in accordance with documentation instructions, procedures, or drawing of a type appropriate to the circumstances, and 2) these documents include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities were satisfactorily performed.

Safety Analysis Report, Section 3.15, "Q and AQ Structures, Systems, and Components," specifies the High Pressure Fire Water (HPFW) system as an augmented quality (AQ) system.

Contrary to the above, between October 13, 2000 and December 23, 2000, actions taken to winterize process buildings failed to ensure that the HPFW system remained operable during cold weather. The procedure did not include appropriate acceptance criteria for determining that the required activities were satisfactorily performed. Specifically, Procedure CP4-CO-CM6032 did not include an acceptance criteria to ensure that ventilation fans were operable as required to preclude freezing of the HPFW system.

**USEC Response**

**I. Reason for the Violation**

The root cause of the violation is the lack of adequate management controls (i.e., policy or procedure) to ensure that equipment required to maintain building temperatures above freezing was operating prior to the onset of winter weather. The current cold weather protection program for the plant is not driven by a plant level procedure or management policy. The overall program is described in a plant document (KY/F-196), used in the past to meet Department of Energy orders, but has not been converted into a plant procedure. The cascade buildings cold weather program is described in procedure, CP4-CO-CM6032, "Preparation For and Recovery From Cold Weather Protection." However, this procedure does not include any requirements to verify cold weather equipment alignment, require a minimum number of fans to be running, or perform routine checks to ensure system requirements are maintained.

The investigation determined that the procedure (CP4-CO-CM6032) was used as written to identify building equipment deficiencies and work orders were filed to correct the problems.

One of the primary functions of the cascade process building's ventilation system is to distribute process heat within the building to avoid water-freezing problems. Thus, if the equipment is aligned and functioning properly and the thermostats are set correctly, sufficient warm air will be automatically recirculated back into all appropriate areas of the building to preclude freezing of building components.

## **II. Corrective Actions Taken**

1. On December 29, 2000, a Long Term Order was issued to all cascade buildings to check the sprinkler standpipe temperatures on a daily basis to ensure system operability.

## **III. Corrective Action to be Taken**

1. By May 4, 2001, Maintenance will develop and implement a plant level procedure to establish the plant's cold weather readiness program including requirements, standards, and management oversight controls to ensure the plant facilities are prepared for cold weather operations.
2. By July 31, 2001, Operations will revise CP4-CO-CM6032 to implement the requirements of the plant level cold weather readiness procedure (see action No. 1). This procedure will also include requirements on the cold weather alignment, minimum equipment requirements for the ventilation system, and routine checks during cold weather.

## **IV. Date of Full Compliance**

Full Compliance was achieved on December 23, 2000, at 06:15 hrs. when the LCO for the inoperable building sprinkler system was entered.