



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

March 19, 1998

EA 98-012

Mr. J. H. Miller  
Vice President - Production  
United States Enrichment Corporation  
Two Democracy Center  
5903 Rockledge Drive  
Bethesda, MD 20817

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY-  
\$55,000 (NRC Inspection Report 070-07002/97013(DNMS))

Dear Mr. Miller:

This refers to the inspection conducted December 8, 1997 through January 9, 1998, at the United States Enrichment Corporation (USEC) Portsmouth Gaseous Diffusion Plant in Portsmouth, Ohio. The purpose of the inspection was to review the activities authorized by NRC Certificate No. GDP-2. The inspection report detailing our findings was issued on February 4, 1998. A predecisional enforcement conference was held with you and members of your staff on February 19, 1998 to discuss the apparent violations, the root causes, and the corrective actions.

Based on the information developed during the inspection and the information provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection report.

The violations involve major deficiencies in the nuclear criticality safety and self-assessment programs at the Portsmouth facility. The NRC considers these violations to be of significant regulatory concern because the root causes spanned the breadth and depth of the nuclear criticality safety program and represented an increased risk for fissile material operations. While the violations did not result in an immediate safety issue, the magnitude of the underlying problems indicate that USEC was not effective in identifying and promptly correcting these problems. In addition, considerable NRC involvement was necessary between October 1997 and January 1998, to ensure that the full breadth of program deficiencies were pursued, the root causes were identified, and appropriate corrective actions were implemented. Significant NRC effort was necessary to focus USEC's corrective action processes in order to obtain comprehensive corrective actions

During the conference, USEC staff was in agreement with the violations as discussed in the inspection report and provided information which indicates that the root causes for these violations included inadequate management oversight of processes used to develop the criticality controls and to monitor day-to-day implementation of the approved controls. In regard

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to Violation A, your staff also provided information, developed since the inspection period, which demonstrated that the potential for an inadvertent criticality associated with the large uranium deposit in an idle portion of the cascade was very low. The NRC noted that the very low probability for an inadvertent criticality was not based upon your staff's proper implementation of the system criticality controls. Instead, the low probability was based upon a combination of operations practices which resulted in two physical barriers being present between the recirculating cooling water and the deposit.

The violations, in the enclosed Notice, represent a programmatic problem in the development and implementation of the nuclear criticality safety program. Therefore, the violations have been classified in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions (Enforcement Policy)," NUREG-1600, as a Severity Level III problem.

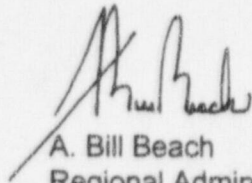
In accordance with the Enforcement Policy, a base civil penalty in the amount of \$55,000 is considered for a Severity Level III problem. Because Portsmouth has not been the subject of escalated enforcement actions since March 3, 1997, when NRC began its regulatory oversight, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. At the predecisional enforcement conference, your staff presented corrective actions taken and/or planned to address the violations. Those actions included but were not limited to: inspection of all other condensers in a shutdown condition to assure compliance with controls, modification of the nuclear criticality safety procedure to include a review of pre-existing conditions, revision of all nuclear criticality safety approvals to eliminate confusing controls, and a root cause analysis to define program deficiencies. However, due to the significant NRC involvement to ensure comprehensive corrective actions, credit for corrective action is not warranted.

To emphasize the importance of prompt and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the base amount of \$55,000 for the Severity Level III problem. The NRC encourages prompt identification of violations by licensees and certificate holders. Since Portsmouth has not been the subject of prior escalated enforcement, identification was not considered in our deliberations as described in the Enforcement Policy. However, we note that while USEC identified many of the specific problems in the nuclear criticality safety program, it failed to recognize the existence of a major programmatic problem in this area.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Bill Beach". The signature is stylized with a large initial "A" and a long horizontal stroke.

A. Bill Beach  
Regional Administrator

Docket No. 070-07002  
Certificate No. GDP-2

Enclosure: Notice of Violation and Proposed  
Imposition of Civil Penalty



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