



Pre-Decisional Enforcement Conference
for
Global Nuclear Fuel - Americas, L.L.C.

May 19, 2008, 1:00 pm
NRC Region II Office
Atlanta, GA



Agenda

- I. Opening Remarks, Introductions, and Summary of the Issues**
Luis A. Reyes, Regional Administrator
- II. NRC Enforcement Policy**
Carolyn Evans, Regional Counsel/Enforcement Officer
- III. Statement of Concerns/Apparent Violations**
Joseph W. Shea, Director of Division of Fuel Facility Inspection
- IV. Licensee Presentation**
GNF-A, L.L.C., Wilmington Site Management
- V. Break/NRC Caucus**
- VI. NRC Follow-up Questions**
- VII. Closing Remarks**
Luis A. Reyes, Regional Administrator



Apparent Violation 1

Safety Condition No. 1 of License No. Special Nuclear Material (SNM)-1097 requires that material be used in accordance with the statements, representations, and conditions in the Application dated June 5, and December 7, 1999, and supplements thereto.

License section 5.1.1 requires that process designs shall incorporate sufficient margins of safety to require at least two unlikely, independent, and concurrent changes in process conditions before a criticality accident is possible. For each significant portion of the process, a defense of one or more system parameters is documented in the criticality safety analysis (CSA), which is reviewed and enforced.

On January 29, 2008, while steam was available, the top hatch valve for the Line 2 cooling hoppers was unable to fully close, such that there was a direct path for steam to enter the hoppers. Therefore, the hatch valves, one of two double contingency controls assuring exclusion of moderation from the hoppers, were not preventing the ingress of conversion process gases as stated in the CSA. Because the hatch valve control was not maintained, only one change in a process condition would have been required for a criticality accident to be possible.

The Apparent Violation discussed at this conference is pre-decisional and is subject to change.



Apparent Violation 2

Safety Condition S-3, of SNM-1097, requires, in part, that the licensee maintain and execute the response measures in the Radiological Contingency and Emergency Plan (RC&EP), dated May 31, 2002, and any revision made by the licensee consistent with 10 CFR 70.32(i).

The RC &EP Chapter 3, Classification and Notification, Section 3.2.1, and Chapter 4, Responsibilities, Section 4.2.1 specify criteria for the Emergency Director (ED) or the Interim ED during "off " hours or holidays to declare an 'Alert'. Section 5.1, Activation of Emergency Response Organization, specifies, in part, that a summary of the provisions in the Plan for the activation and alerting of the emergency organizations for the various emergency classifications is set forth within the emergency procedures. Procedure Number 5, Criticality Emergency Director Instruction, Revision 21, of the RC&EP specifies that if assembly of necessary personnel in the Emergency Control Center (ECC) is declared for unsafe mass conditions, declare an Alert Emergency.

At 1819 hours (hrs) on January 30, 2008, the Interim ED staffing the licensee's ECC failed to declare an 'Alert' based on a potential unsafe mass of uranium dioxide powder in the 2A cooling hopper, an unsafe geometry configuration, and an observed alarm interlock indicating possible moisture intrusion into the subject hopper. The subsequent arrival of the primary ED at the ECC at approximately 1830 hrs resulted in declaration of an 'Alert' based on the same information.

The Apparent Violation discussed at this conference is pre-decisional and is subject to change.



Apparent Violation 3

Safety Condition S-1, of SNM -1097, authorizes use of Byproduct Source, and/or Special Nuclear Material in accordance with statements, representations, and conditions of the license Application dated June 5, 1997 and December 7, 1999; and supplements thereto.

Section 3.9 of the Application states that licensed material processing or activities will be conducted in accordance with properly issued and approved practices and procedures, plant practices or operating procedures.

Prior to January 30, 2008, the licensee failed to have a properly issued and approved management control procedure for conducting maintenance activities while licensed material remained within potentially affected conversion process equipment.

Specifically, the licensee did not have procedures for performing maintenance on selected Items Relied On for Safety, outlet hatch valves system, while licensed material remained in the conversion process cooling hoppers.

The Apparent Violation discussed at this conference is pre-decisional and is subject to change.



Apparent Violation 4

Safety Condition S-1, of SNM-1097, authorizes use of Byproduct Source, and/or SNM in accordance with statements, representations, and conditions of the Application dated June 5, 1997 and December 7, 1999; and supplements thereto.

Section 6.1.2.2 specifies that responsibilities of the criticality safety function are described in Chapter 2.0 of the Application. Section 2.2.1.4 specifies that the criticality safety function is administratively independent of production responsibilities and includes establishment of criticality safety program including design criteria, procedures, and training; criticality safety support for integrated safety analyses and configuration control; assessment of normal and credible abnormal conditions; and determination of criticality safety limits for controlled parameters.

From December 30, 2007, through January 30, 2008, the licensee conducted conversion line maintenance activities involving the handling of enriched uranium which were not assessed for the known/expected conditions. Specifically, the licensee performed maintenance activities on conversion lines outlet hatch valves systems, while the cooling hoppers contained enriched uranium without criticality safety function review and approval.

The Apparent Violation discussed at this conference is pre-decisional and is subject to change.