



Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

Global Nuclear Fuel

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SPM 13-020

March 25, 2013

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

Subject: Revision to Reply to Notice of Violation, No. 2011-004-01

References: (1) License SNM-1097, Docket 70-1113
(2) NRC Inspection Report, 70-1113/2011-004 and Notice of Violation, 10/31/11
(3) GNF-A Reply to NOV, S. Murray to NRC Document Control Desk, 11/30/11

On November 30, 2011, GNF-A replied to Notice of Violation No. 2011-004-01 (Reference 2). GNF-A has completed all of the short term corrective actions to prevent recurrence for the Notice of Violation.

One of the longer term corrective steps was to more definitively define Items Relied on For Safety (IROFS) boundaries as a part of the Integrated Safety Analysis (ISA) Review Project Scope. Based upon further evaluation and knowledge gained during the ISA reviews, this action was modified since our November 30, 2011 reply to the NOV.

Attached is a revised reply to the notice of violation with modified wording for this action as follows:

3) The corrective steps that will be taken

The ISA Review Project Enhanced Scope includes a verification project to ensure IROFS management measures are appropriately applied.

Scheduled completion: March 31, 2013

Please contact me on (910) 819-5950 if you have any questions or would like to discuss this matter further.

Sincerely,

S. P. Murray, Manager
Facility Licensing

Attachment: Revised GNF-A Reply to Notice of Violation

Commitments: None

cc: Victor McCree, NRC Regional Administrator, Region II Atlanta
M. Sykes, NRC Region II, Atlanta
M. L. Thomas, NRC Region II, Atlanta, GA
M. N. (Nick) Baker, NRC NMSS, Washington, D.C.
T. D. Naquin, NRC NMSS, Washington, D.C.

Attachment

The information provided below summarizes the Notice of Violation dated October 31, 2011 associated with NRC Inspection Report 70-1113/2011-004

VIOLATION NO. 2011-004-01

10 CFR 70.62(d) requires, in part, that each licensee shall establish management measures to ensure compliance with the performance requirements. The management measures shall ensure that engineered and administrative controls that are identified as items relied on for safety (IROFS) are designed, implemented, and maintained, as necessary, to ensure they are available and reliable to perform their function when needed, to comply with the performance requirements.

Contrary to the above, the licensee failed to establish management measures to ensure that IROFS would perform their intended function when needed to comply with the performance requirements as evidenced by the following examples:

(1) Quantitative Risk Assessment (QRA) - 101, "UF6 Cylinder Handling," Table 4-2, "Management Measures," Revision (Rev.) 0, states, in part, that for IROFS 101-01, UF6 Cylinder Skin Temperature, "Procedures" is one of the assigned management measures.

QRA - 101, "UF6 Cylinder Handling", Table 4-1, "Node 101 IROFS," Rev. 0, states, in part, that the safety function of IROFS 101-01 is to prevent the movement of a cylinder that contains liquid UF6 by verifying the skin temperature is below 60° C prior to movement.

On July 1, 2011, a procedure designated as a management measure for IROFS 101-01 would not have prevented the movement of a liquid uranium hexafluoride (UF6) cylinder by verifying the skin temperature is below 60° C prior to movement. Specifically, Operating Procedure (OP) 1331.00, "DCP Vaporization," Rev. 59, Section 7.3.2, "Removal of Cylinder From Autoclave," stated that "IROFS 101-01 Cylinders that have not been fully vaporized and cold trapped must be < 70° C before being removed from the autoclave."

(2) QRA - 201, "DCP Vaporization," Table 4-1, "Node 201 IROFS," Rev. 0, designated IROFS 201-19, Portable Wet Scrubber System, and SOLE IROFS 201-08, Vaporization Area Stack Exhaust Shutdown and Wet Scrubber System as administrative IROFS.

**On July 1, 2011, the licensee failed to establish management measures for the wet scrubber system to ensure that IROFS 201-19 and SOLE IROFS 201-08 were available and reliable to perform their function when needed.
This is a Severity Level IV violation (Section 6.2)**

GNF-A's Response to Violation:

GNF-A admits that it failed to adequately establish management measures as required.

1) The reason for the violation

- A. Operating Procedure (OP) 1331.00, "DCP Vaporization", Rev 59 was issued with updates to reflect IROFS 101-01, including format enhancements for the IROFS associated in the updated Conversion Area ISA. A human performance error was made in the omission of updating the instance of the Section 7.3.2 temperature limit from its former value of 70°F to its new value of 60°F. Despite the addition of a subject matter expert reviewer, the volume of procedure revisions associated with the ISA update degraded the effectiveness of the human independent review. This allowed the failure to change the temperature limit to escape notice.
- B. Management measures for IROFS 201-19, "Portable Wet Scrubber System", and SOLE IROFS 201-08, "Vaporization Area Stack Exhaust Shutdown and Wet Scrubber System", were designated and applied as administrative control IROFS, as their function relied on human action. The project team appropriately applied management measures to the administrative aspect of these IROFS; however, it failed to fully identify the boundary of the IROFS around which management measures were to be applied.

2) Short term corrective actions taken

- A. Operating Procedure (OP) 1331.00, "DCP Vaporization", Rev 60 was revised and re-issued to reflect the lower temperature limit of <60°F prior to withdrawing a cylinder from the autoclave. This revision is in agreement with the temperature limit that was indicated in the training provided in May-June 2011.
- B. IROFS 201-19, "Portable Wet Scrubber System", and SOLE IROFS 201-08, "Vaporization Area Stack Exhaust Shutdown and Wet Scrubber System" were determined to be available and reliable to perform their intended function. The utilities relied upon by the two referenced administrative IROFS were also determined to be available and reliable to perform their intended function based on existing preventative maintenance.

3) The corrective steps that will be taken (*Revised*)

The ISA Review Project Enhanced Scope includes a verification project to ensure IROFS management measures are appropriately applied.

Scheduled completion: March 31, 2013

4) The date when full compliance will be achieved (*Revised*)

Full compliance will be achieved upon implementation of the ISA Review Project Enhanced Scope.