



May 9, 2008  
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U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Gentleman:

**Subject:** Reply to a Notice of Violation from NRC Inspection Report No. 70-1257/2008-001;  
AREVA NP Inc.; License No. SNM-1227

**Reference:** Letter, George B. Kuzo (NRC) to Charles Perkins (AREVA), "NRC Inspection Report  
No. 70-1257/2008-001 and Notice of Violation," dated April 11, 2008.

Attached is AREVA NP Inc.'s response to the violations described in the referenced letter.

If you have questions or require further information, please contact me at 509-375-8409 or C. D.  
Manning at 509-375-8237.

Very truly yours,

A handwritten signature in black ink, appearing to read 'R. E. Link', with a circled 'L' to the right.

R. E. Link, Manager  
Environmental, Health, Safety & Licensing

Enclosures

cc: Luis Reyes,  
Regional Administrator  
NRC Region II

George B. Kuzo, Acting Branch Chief  
Fuel Facility Inspection Branch 3  
Division of Fuel Facility Inspection  
NRC Region II

N. M. Baker  
Project Manager  
NRC Headquarters

**AREVA NP INC.**

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**Reply to Notice of Violations**  
**NRC Inspection Report 70-1257/2008-001; AREVA NP Inc.**

Violation (VIO 70-1257/2008-001-01)

The violation as stated in the referenced inspection report is as follows:

*10 CFR 20.1703 (c) (4) (viii) requires, in part, that licensee's have written procedures for the maintenance and testing of respiratory protection equipment.*

*Contrary to the above, prior to March 7, 2008, the licensee failed to have written procedures or guidance to implement the hydrostatic testing of self-contained breathing apparatus (SCBA) cylinders designated for plant emergency response activities. Hydrostatic testing of breathing air cylinders including SCBA cylinders is required at a five year frequency interval as specified in the Department of Transportation (DOT) Container Specifications DOT-SP 10915 and 10945, Section 7, Safety Control Measures, Paragraph b, Testing.*

*This is a Severity Level IV violation (Supplement VI).*

Background

New SCBA air cylinders were purchased for use at the AREVA NP Inc. Horn Rapids Road (HRR) location in the year 2000. The new SCBA air cylinders were placed into service without implementing a program to ensure that they would be hydrostatically tested at the required frequency. During the March 2008 NRC inspection of the HRR Emergency Preparedness program, NRC inspectors asked about hydrostatic testing of SCBA air cylinders. AREVA personnel did not have records or a hydrostatic testing program for the HRR SCBA air cylinders.

Reason for the Violation

In this case, the as-found condition was that the SCBA air cylinders were beyond their hydrostatic testing expiration date. The expectation is that the cylinders should have been hydrostatically tested prior to the expiration date. The former EP Coordinator's decision not to hydrostatically test the SCBA air cylinders was based on the fact that the hydrostatic testing requirement is a DOT regulation. The former EP Coordinator decided that since the HRR SCBA air cylinders were not transported over the road, the DOT requirement did not apply to the HRR cylinders. This inappropriate action was due to tunnel vision is that he did not consider the "big picture" and investigate reasons to follow DOT regulations besides purely transportation issues. This tunnel vision caused a programmatic deficiency, in that the procedures lacked the requirement to have the cylinders hydrostatically tested.

Corrective Actions Taken

After discovery of the deficiency, groups of SCBA air cylinders were sent to a third party for hydrostatic testing. All AREVA HRR SCBA air cylinders have been successfully recertified with no defects discovered.

Corrective Actions to Avoid Further Violations

A preventative maintenance schedule has been written to ensure that all HRR SCBA air cylinders are hydrostatically tested at the required frequency.

### Date of Full Compliance

AREVA NP Inc. is currently in full compliance with the requirements listed in the referenced notice of violation.

### Violation (VIO 70-1257/2008-001-03)

The violation as stated in the referenced inspection report is as follows:

*Safety Condition S-1 of Special Nuclear Materials License No. SNM-1227 authorizes the use of licensed materials in accordance with the statements, representations, and conditions in the License Application and Supplements.*

*Section 2.4 of the License Application states in part, that F-ANP conducts its business in accordance with a system of Standard Operating Procedures, Company Standards, and Policy Guides.*

*Contrary to the above, prior to March 13, 2008, the licensee failed to conduct its business in accordance with a system of Standard Operating Procedures, Company Standards, and Policy Guides as described in the following examples:*

- 1. Requirement 1.c of the Administrative Limits and Controls section of Nuclear Criticality Safety Specification, E04-NCSS-G06, states that in process areas absent an engineered fire suppression system, combustible materials in transit shall be limited in volume to a maximum of two 27 ft<sup>3</sup> accumulations in an area. These two accumulations must be spaced at least 10 feet from each other and from other open combustible material storage areas such as those specified on drawing CSA-607,590. Specifically, the licensee failed to limit in transit combustible materials to a maximum of two 27 ft<sup>3</sup> accumulations spaced at least 10 feet from each other in Room 60 of the Effluent Liquid Operations (ELO) Building. In addition, in Room 70 of the ELO Building the licensee failed to limit combustible materials in transit to a volume of 27 ft<sup>3</sup>.*
- 2. Requirement 4 of Safety Related Equipment – 2 of Nuclear Criticality Safety Specification, E04-NCSS-G06, requires verification that the listed fire-doors will function correctly. Specifically, the licensee did not have an inspection program in place to ensure that fire-doors not linked to the fire alarm will function correctly. NRC inspector identified that the fire-door between the SF building and the SF addition did not function correctly.*
- 3. Requirement 4 of Safety Related Equipment – 2 of Nuclear Criticality Safety Specification, E04-NCSS-G06, requires verification that firewalls are free from unsealed penetrations. Specifically, the licensee failed to ensure that the fire wall between the ELO building and the ELO addition did not have unsealed penetrations.*

*This is a Severity Level IV violation (Supplement VI).*

### Background (Example 1)

The ELO building is unique in that it contains offices, labs, and process development areas. Rooms 60 and 70 of the ELO have historically been used for testing, equipment setup and other activities. There were two activities in progress that resulted in the concentration of combustibles into discrete accumulations in the rooms. In Room 60, during the week of 3/3, a

radiation zone had been established around the equipment undergoing maintenance. This required that the associated area of the mezzanine be cleared of material. The material in the area was accumulated and stored just off the mezzanine. As this distributed material was more concentrated by the clearing effort, it is apparent that the combustible loading in the area had been exceeded. In room 70, for several months, efforts were ongoing to clean out years of accumulation from testing, machining and assembly. Wooden boxes and pallets were brought in to allow lifting of significant quantities of parts, screws, bolts and other miscellaneous materials. This again allowed accumulations of transient materials to concentrate causing the combustible loading to be exceeded. A tour by the manager responsible for the area on March 11 did not identify the fire prevention issue with combustible loading, primarily because of the positive aspect of the progress of the ongoing efforts to clean out the long term accumulations in the area and the impact of the maintenance activities. The personnel who were responsible for moving the materials for cleanup and maintenance did not recognize the accumulations exceeded the combustible loading requirements or were not aware that the area was governed by combustible loading requirements.

#### Reason for the Violation

The manager performing the fire load walkthrough for the area and the operators performing tasks did not receive proper training that would have alerted them of the non-compliance. This deficiency of training existed due to the lack of programmatic interfaces that would have alerted the manager and operators of the combustible loading requirements.

#### Corrective Actions Taken

After discovery of the deficiency, a fire watch was initiated for the ELO rooms 60 and 70 until the combustible loading was brought to acceptable levels the next day.

#### Corrective Actions to Avoid Further Violations

There are three corrective actions identified to avoid further violations:

- A. The employees that work in ELO rooms 60 and 70 will be trained to the combustible loading requirements for that area.
- B. The building manager will perform a walkthrough of ELO with EHS&L to ensure the unique nature of the building is being appropriately controlled with respect to safety requirements.
- C. All operations supervisors and managers will perform an annual review of their respective areas to better understand allowed combustible loading.

#### Date of Full Compliance

AREVA NP Inc. is currently in full compliance with the requirements listed in the referenced notice of violation.

#### Background (Example 2)

The subject door between the NAF ceramics processing room and the NAF furnace room is a fire door, and is a standard-width single door in a fairly narrow hallway. The NAF furnace room is used as an intermediate storage room for buckets and barrels of powder and pellets that are being transferred into and out of the building. This door is used many times per shift in the

transfer of material between the ceramics processing room and the intermediate storage arrays. Due to the weight of the buckets and barrels, the transfer of buckets and barrels is performed using a mechanical assist (motorized cart). During these operations, the cart occasionally runs into the door, which causes damage. Eventually, this damage can be so great that the door cannot effectively perform its fire door role. The damage to the fire door and the fact that the fire door would not close completely was not reported to supervision by the operators moving material. Operations, which usually includes EHS&L, does a monthly safety inspection of their respective areas and the fact that the fire door did not completely shut went undetected.

#### Reason for the Violation

There are three apparent causes identified as to why the damage to the door did not get reported and repaired.

- A. Most operators did not realize that this door is a fire door, and that damage can degrade its effectiveness. There are no specific markings on the door and there are no specific warnings in the procedures used by NAF operators. For most operators, this door is just a barrier between two rooms that has to be negotiated while trying to complete a task.
- B. There is inadequate detail in the procedures used by NAF operators to alert operators where fire doors are located or what to do in case of damage.
- C. Operations performs a monthly safety inspection of all Operations areas. These safety inspection teams typically include personnel from other areas, including EHS&L, for "fresh eyes". However, the damage to the NAF fire door was not noted during the recent safety inspections. The inspection team uses a checklist of items for reference during the safety walkthroughs. This checklist does not include inspecting the integrity and proper function of fire doors, making it possible to overlook that category.

#### Corrective Actions Taken

After discovery of the deficiency, the fire door between the NAF ceramics processing room and the NAF furnace room was repaired to allow it to close properly. A new fire door has been ordered and will be installed upon arrival.

#### Corrective Actions to Avoid Further Violations

There are three corrective actions identified to avoid further violations:

- A. Revise MCP-30049, (Construction or Modification Change Control), or provide an equivalent solution, to provide guidance for actions to be taken when damage to doors (particularly fire doors) occurs.
- B. Fire doors will be clearly identified and instructions for employees to report damage to supervision needs to be developed.
- C. The monthly safety inspection PM checklist will be modified to include looking for proper fire door function and damage.

#### Date of Full Compliance

AREVA NP Inc. is currently in full compliance with the requirements listed in the referenced notice of violation.

### Background (Example 3)

Two penetrations in the fire wall between the ELO building and the ELO addition were improperly sealed. Both of these installations were believed to have been done in the early 90's on a work order. The first penetration consisted of a four inch plastic cap screwed onto a metal pipe. This four inch plastic cap did not meet the fire rating for the fire wall. The second penetration existed around piping that went through the wall between sections of the building. An Operations safety inspection, which usually includes EHS&L, was performed monthly without identifying these deficiencies.

### Reason for the Violation

There are two apparent causes identified as to why the penetrations existed and were not discovered.

- A. The two improperly sealed penetrations were not prevented due to the use of a work order and not an engineering change notice (ECN). No particular ECN could be tied to the penetrations in question, which identifies an inadequate work process. In the current ECN procedure, any modifications to a fire wall would require the completion of a building wall/floor penetration request and an inspection of the penetration by the responsible engineer.
- B. Since the penetrations were not identified by two different groups under two different safety inspection PM's, the personnel did not have the proper understanding to properly conduct the inspection of the fire wall.

### Corrective Actions Taken

After discovery of the deficiency, the two penetrations in the fire wall between the ELO building and the ELO addition were brought into compliance.

### Corrective Actions to Avoid Further Violations

There are four corrective actions identified to avoid further violations:

- A. Revise MCP-30379, (Construction or Modification Change Control), Section 5.6.3 (Wall/Floor Penetration) to emphasize the requirement for fire wall sealing immediately after the penetration is made.
- B. Revise MCP-30379, (Construction or Modification Change Control), Attachment "J", to include a fire wall penetration yes/no box and statement to refer to section 5.6.3 for directions.
- C. Provide fire wall inspection training for all personnel responsible for completing monthly safety inspection PM's CG06P001 through CG06P010.
- D. Independent verification that fire walls throughout the plant are properly identified.

### Date of Full Compliance

AREVA NP Inc. is currently in full compliance with the requirements listed in the referenced notice of violation.