

June 7, 2012  
REL:12:025



U.S. Nuclear Regulatory Commission  
Director, Office of Nuclear Material  
Safety and Safeguards  
Attn: Document Control Desk  
Washington, D.C. 20555

Gentlemen:

**Subject: Thirty-day Follow-up Report to May 8, 2012 Incident Reported Under 10 CFR 70 Appendix A Criterion (b)(1) (NRC Event No. 47908); AREVA NP Inc. Richland Facility; License No. SNM-1227; Docket No. 70-1257**

On May 8, 2012, the AREVA NP Inc. Richland facility reported that based on a letter issued by the NRC dated May 7, 2012 from John D. Kinneman to Janet R. Schlueter, AREVA concluded that the Richland Fuel Facility ISA was not adequate. This determination is based on the application of our NRC approved methodology meeting the 10CFR70.61 performance criteria being met by a determination of accident scenarios to be "not credible" based on plant conditions or features that were not declared IROFS. For example, an accidental criticality accident resulting from a solution leak onto the floor was declared "not credible" because gravity would cause the leak to spread out on the floor in a safe geometry. However the floor was not declared an IROFS. Another example is that an accidental criticality in a 1-inch diameter pipe was declared "not credible" due to the geometry of the pipe and no credible mechanism being identified that could cause the pipe to "balloon" into an unfavorable geometry, yet the pipe diameter was not declared an IROFS. Other similar conditions exist at the Richland facility.

This reportable condition does not change any facility radiological or chemical hazards nor does it reflect any degradation or failures structures, systems, equipment, components, or activities of personnel relied on to prevent potential accidents or to mitigate their consequences.

The facility is continuing to operate safely under the constraints of existing operating procedures, including a justification for continued operations with compensatory measures. These compensatory measures include:

1. All proposed changes to the facility will continue to be evaluated for potential impact to the facility ISA before such changes are made.
2. Nuclear Criticality Safety audits and walk through activities will focus on changes to process areas to assure continued compliance with 10CFR70.72 change control requirements and will verify the continued presence of design features used as baseline inputs or assumptions in the present ISA.

**AREVA NP INC.**

2101 Horn Rapids Road, Richland, WA 99354  
Tel.: 509 375 8100 [www.areva.com](http://www.areva.com)

JE72

AREVA continues to work with Nuclear Energy Institute and other fuel cycle facilities as well as the NRC to determine the changes to the facility ISA that will be required to meet this new position of the NRC conveyed in the May 7<sup>th</sup> letter. Once clear expectations are obtained, AREVA will proceed to revise the ISA and associated documents in a risk informed and prioritized manner. This effort is expected to take an additional 2-3 years.

#### Caller Identification

This condition was reported to the NRC Operations Center by Robert E. Link, AREVA EHS&L Manager, on May 8, 2012 at 1555 EDT (509-375-8409).

#### Date, Time, and Exact Location of Incident

The reportable condition was determined to exist on May 8, 2012 at approximately 0730 hours local time. This condition involves the facility ISA.

#### Incident Description

On May 8, 2012, the AREVA NP Inc. Richland facility reported that based on a letter issued by the NRC dated May 7, 2012 from John D. Kinneman to Janet R. Schlueter, AREVA concluded that the facility ISA was not adequate because unacceptable consequences resulting from some process upsets were determined to be "not credible" based on plant conditions or features that were not declared IROFS. For example, an accidental criticality accident resulting from a solution leak onto the floor was declared "not credible" because gravity would cause the leak to spread out on the floor in a safe geometry. However the floor was not declared an IROFS. Another example is that an accidental criticality in a 1-inch diameter pipe was declared "not credible" due to the geometry of the pipe and not credible mechanism being identified that could cause the pipe to balloon into an unfavorable geometry, yet the pipe diameter was not declared an IROFS. Other similar conditions exist at the Richland facility.

#### Safety Significance of the Incident

The safety significance of this event is low. This condition is a regulatory compliance issue and does not alter the safe state of the facility.

No emergency condition or radiological or chemical releases resulted from this condition. AREVA did not make any other notifications to government agencies and did not issue a press release.

#### Incident Response Actions

A number of actions were taken in direct response to this incident, as follows:

- Appropriate internal and regulatory notifications were made.
- A condition report was initiated into the AREVA Corrective Action Program.

#### Interim and Near-Term Corrective Actions

The facility is continuing to operate safely under the constraints of existing operating procedures, including a justification for continued operations with compensatory measures. These compensatory measures include:

1. All proposed changes to the facility will continue to be evaluated for potential impact to the facility ISA before such changes are made.
2. Nuclear Criticality Safety audits and walk through activities will focus on changes to process areas to assure continued compliance with 10CFR70.72 change control requirements and will verify the continued presence of design features used as baseline inputs or assumptions in the present ISA.

Incident Cause

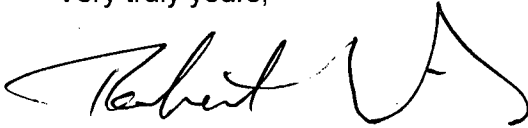
This is an industry wide issue that has been discussed with the NRC for over three years and stems from differing understandings of the regulatory language in 10CFR70.

Actions to Prevent Recurrence

AREVA will continue to work with Industry peers and the NRC to help develop clear regulations and associated regulatory guidance in an effort to minimize potential divergent understandings of regulatory language.

If you have questions about this incident or AREVA NP's associated response, please contact me on 509-375-8409.

Very truly yours,



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

/mah

cc: U.S. Nuclear Regulatory Commission, Region II  
Attn: M. D. Sykes, Chief  
Fuel Facility Branch 3  
Marquis One Tower, 23 T85  
245 Peachtree Center Avenue N.E., Suite 1200  
Atlanta, GA 30303-8931

U.S. Nuclear Regulatory Commission, Region II  
Attn: John D. Kinneman, Director  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards  
11545 Rockville Pike, MS E2C40M  
Rockville, MD 20852