



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

March 2, 2007

EA-07-039  
NMED No. 060660

Mr. Charles Perkins  
Site Manager  
AREVA NP, Inc.  
2101 Horn Rapids Road  
Richland, WA 99352-0130

SUBJECT: NRC INSPECTION REPORT NO. 70-1257/2007-001

Dear Mr. Perkins:

This refers to the inspection conducted at your Richland facility from January 29 through February 1, 2007. The purpose of the inspection was to review the status of corrective actions that were identified by your Root Cause Analysis and Apparent Cause Analysis Teams in response to the October 23, 2006, HF vapor leak.

As a result of the inspection, the enclosed NRC Form 591FF, SAFETY INSPECTION REPORT, is being issued. The enclosed form indicate that no violations were identified during the inspection of your licensed activities. Please retain the original Form 591FF Parts 1 and 3 for your files.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Manuel Crespo for */RA/*

David A. Ayres, Chief  
Fuel Facility Inspection Branch 1  
Division of Fuel Facility Inspection

Docket No. 70-1257  
License No. SNM-1227

Enclosure: NRC Form 591FF Parts 1 and 3

cc w/encl: (See page 2)

C. Perkins

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cc w/encl:

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Distribution w/encl: (See page 3)

C. Perkins

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- A. Gooden, RII
- N. Baker, NMSS
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- M. Galloway NMSS

PUBLICLY AVAILABLE     
  NON-PUBLICLY AVAILABLE     
  SENSITIVE     
  NON-SENSITIVE

ADAMS:  Yes    ACCESSION NUMBER: \_\_\_\_\_

OFFICE	RII:DFFI						
SIGNATURE	/RA/						
NAME	AGooden						
DATE	03/01/2007	3/ /2007	3/ /2007	3/ /2007	3/ /2007	3/ /2007	3/ /2007
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  AREVA NP, INC. 2101 Horn Rapids Road Richland, WA 99352		2. NRC/REGIONAL OFFICE <b>U.S. Nuclear Regulatory Commission</b> <b>Region II, Division of Fuel Facilities Inspection</b> <b>61 Forsyth Street, Suite 23T85</b> <b>Atlanta, GA 30303</b>	
INSPECTION 70-1257/2007-001			
3. DOCKET NUMBER(S) : 70-1257	4. LICENSEE NUMBER(S): SNM - 1227	5. DATE(S) OF INSPECTION: 29 Jan. - 1 Feb. 2007	

**LICENSEE:**  
The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

1. Based on the inspection findings, no violations were identified.

2. Previous violation(s) closed.

3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.  
\_\_\_\_\_ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective

4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	Alphonsa Gooden	Manuel Crespo for /RA/	03/02/2007

Enclosure

**SAFETY INSPECTION REPORT  
AND COMPLIANCE INSPECTION**

1. LICENSEE

**AREVA NP, INC.  
2101 Horn Rapids Road  
Richland, WA 99352**

2. NRC/REGIONAL OFFICE

**U.S. Nuclear Regulatory Commission  
Region II, Division of Fuel Facilities Inspection  
61 Forsyth Street, Suite 23T85  
Atlanta, GA 30303**

REPORT NUMBER(S): **70-1257/2007-001**

3. DOCKET NUMBER(S):

**70-1257**

4. LICENSE NUMBER(S):

**SNM - 1227**

5. DATE(S) OF INSPECTION:

**29 Jan. - 1 Feb. 2007**

6. INSPECTOR(S):

A. Gooden

7. INSPECTION PROCEDURES USED:

**92701**

**SUPPLEMENTAL INSPECTION INFORMATION**

**Executive Summary**

AREVA NP Richland facility fabricates low-enriched uranium fuel and blended low-enriched uranium fuel (BLEU) for use in commercial reactors. During the period of the inspection, with the exception of ADU and SWUR areas, all operations were normal.

This special, announced inspection, was to review the status of corrective actions that were identified by the licensee's Root Cause Analysis and Apparent Cause Analysis Teams in response to the October 23, 2006, hydrofluoric (HF) acid vapor leak. The corrective actions were considered adequate to address the issues identified in the root cause analysis (RCA) and apparent cause analysis (ACA) to prevent a recurrence in the event of a similar occurrence. Areas of corrective actions reviewed included:

**Reportability**

- The internal reporting procedures were revised to ensure that the appropriate site contact(s) are notified and notification is timely.
- The external reporting procedures were revised to include criteria/trigger points for when to perform a formal evaluation of events to determine the reportability aspects to NRC.

**HF Response Procedures**

- Several procedures were modified involving respiratory protection issuance, responding to hazardous substances, treatment of injuries, and the treatment of contaminated injuries, to ensure that timely and appropriate actions are taken.
- The inspector noted that a significant number of procedures were revised since the October event and in one instance the procedure change resulted in an inconsistency involving the respirator use guidelines for HF in Operations Procedure MCP-30036 and Safety Procedure MCP-30044.

**Executive Summary** (continued)

**HF Response Training**

- The combination of HF awareness classroom training and field performance demonstration using the Draeger sampling equipment was effective in raising the awareness of personnel in responding to an HF leak.
- The inspector determined that all personnel requiring the HF awareness training had not completed the training. The licensee acknowledged that training had not been completed but shall be completed by February 16, 2007.
- Select individuals interviewed by the inspector demonstrated adequate familiarity with the use of the Draeger equipment and were aware of the recently installed HF detection and warning system, and the proper response to a leak involving HF.

**Equipment Installation and Maintenance**

- Additional HF detectors were installed with both audible and visual warning capability. The inspector reviewed the Engineering Change Notice package and interviewed the engineer with responsibility for the installation of the detectors and determined that the equipment was installed in accordance with configuration control procedures.
- The licensee's testing frequency of every three months for the HF detectors (based on operating experience with similar HF detectors) was less frequent than the equipment manufacturer's monthly recommendation to ensure reliability. The inconsistency was discussed as an inspector followup item (IFI 70-1257/2007-01) to evaluate the operability history of similar HF detectors at the site to determine the adequacy of testing frequency to ensure detector reliability.
- A procedure had been developed but not implemented to inspect the reactor vessel integrity. The inspector reviewed documentation and was informed by a licensee contact that Procedure PG 00012 "BC Reactor Inspections", would be implemented in April 2007 during a planned shutdown for plant maintenance and modification activity. The procedure will examine the reactor vessel plenum welds, the vessel wall thickness for bulging, and the upper and bottom portions of reactor for the presence of cracking.
- Documentation was reviewed by the inspector to show that the previously untested smoke detectors included as Items Relied On For Safety (IROFS) in the Integrated Safety Analysis (ISA) were functionally tested on January 8, 2007. No problems were noted. According to interviewee and maintenance documentation, the detectors will be examined annually.

**Executive Summary** (continued)

**Integrated Safety Analysis**

- An updated ISA was submitted to NRC dated January 31, 2007, which included accident sequences involving the release of HF only resulting in potential personnel exposure.

**Items Opened, Closed, And Discussed**

<b><u>Item</u></b>	<b><u>Status</u></b>	<b><u>Description</u></b>
70-1257/2007-01-001	Open	IFI - Evaluate The Operability History Of Similar HF Detectors At The Site To Determine The Adequacy Of Testing Frequency To Ensure Detector Reliability.