



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

June 20, 2006

Mr. R. J. Land
Plant Manager
Areva NP, Inc.
2101 Horn Rapids Road
Richland, Washington 99352

SUBJECT: NRC INSPECTION REPORT NO. 70-1257/2006-005 AND NOTICE OF VIOLATION

Dear Mr. Land:

This refers to the inspection conducted from May 15-25, 2006, at your Richland facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements.

As a result of the inspection, the enclosed NRC Form 591X, SAFETY INSPECTION, is being issued. The first enclosed form sets forth two violations noted during the inspection of your program. Please acknowledge receipt of this form by signing and dating it in the appropriate spaces. You are requested to retain the original and return a signed and dated copy to this office within ten days. Please retain the form in your files. No acknowledgment of this letter is required. However, should you have any questions, we shall be pleased to discuss them with you.

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,

/RA/

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

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

Enclosure: (See page 2)

Enclosure: NRC Form 591FF Parts 1 and 3

cc w/encl:
Thomas Scott Wilkerson, Vice President, Operations
Areva NP
2101 Horn Rapids Road
Richland, Washington 99352

Charles Perkins, Richland Operations Manager
Areva NP
2101 Horn Rapids Road
Richland, Washington 99352

Robert E. Link, Manager
Environmental, Health, Safety & Licensing
Areva NP
2101 Horn Rapids Road
Richland, Washington 99352

Loren J. Maas, Manager
Licensing and Compliance
Areva NP
2101 Horn Rapids Road
Richland, Washington 99352

Calvin D. Manning, Manager
Nuclear Criticality Safety
Areva NP
2101 Horn Rapids Road
Richland, Washington 99352

Gary L. Robertson, Director
Division of Radiation Protection
Department of Health, Bldg 5
PO Box 47827
7171 Cleanwater Lane
Olympia, Washington 98504-7827

Distribution w/encl: (See page 3)

R. J. Land

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Distribution w/encl:

D. Ayres, RII
A. Gooden, RII
N. Baker, NMSS
M. Adams, NMSS
M. Galloway NMSS
PUBLIC

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE

ADAMS: X Yes ACCESSION NUMBER: _____

| | | | | | | | |
|--------------|-------------|------------|-------------|--------|--------|--------|--------|
| OFFICE | RII:DFFI | RII:DFFI | RII:DFFI | | | | |
| SIGNATURE | WBG 6/21/06 | OL 6/20/06 | WBG 6/21/06 | | | | |
| NAME | WBritz | OLopez | AGooden | | | | |
| DATE | 06/ /2006 | 06/ /2006 | 06/ /2006 | | | | |
| E-MAIL COPY? | YES | YES | YES NO | YES NO | YES NO | YES NO | YES NO |

**SAFETY INSPECTION REPORT
AND COMPLIANCE INSPECTION**

1. LICENSEE

**Areva NP, Inc.
2101 Horn Rapids Road
Richland, Washington 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): **2006-005**

3. DOCKET NUMBER(S):

70-1257

4. LICENSE NUMBER(S):

SNM-1227

5. DATE(S) OF INSPECTION:

May 15-25, 2006

6. INSPECTOR(S): W. Britz/Omar Lopez

7. INSPECTION PROCEDURES USED: 88056-88066 and 88055

SUPPLEMENTAL INSPECTION INFORMATION

Executive Summary

The Areva Richland Facility converts UF₆ to UO₂ for fabrication into low-enriched uranium fuel for use in nuclear power reactors. During the period of the inspection, all operations were normal.

This routine, announced inspection included observations and evaluation of the chemical safety and fire protection programs. The inspection involved observations of work activities, reviews of selected procedures and records, and interviews with plant personnel. The inspection results were as outlined below:

Fire Protection

- The inspectors confirmed that the licensee performed internal audits in accordance with license requirements.
- There had been no changes in management or support personnel and no significant issues since the last inspection.
- Reviewed fire safety systems, including Items Relied on for Safety, were implemented and maintained properly. However, a violation with two examples, 70-1257/2006-005-001, was identified for the failure to properly implement software modifications that impact the functionality of the fire alarm.
- The process, equipment, and material storage areas were operated in accordance with fire safety requirements. The licensee adequately controlled combustible materials throughout the facility.
- A violation with two examples, 70-1257/2006-005-002, was identified for the failure follow procedures. The first examples is related to the failure to follow the hot work procedure, which resulted in a small fire in the powder dissolver room. The second example is related to the failure to review/revalidate the Fire Hazards Analyses for the UO₂ Building, the Facility Support Storage Building, the Speciality Fuel Building, and the LUR/SPF Building. Specifically, the Fire Hazard Analysis for the Speciality Fuel Building did not mention the sprinklers system in the incinerator room and the analysis mentioned that there were five firewalls in the facility, when according to the licensee there is only one firewall in the facility.
- The inspectors noted the following deficiencies in the Pre-Fire plan:
 - No designation of fire walls for the Ammonia Recovery Facility , SF/SWUR building , UO₂ building , Dry Conversion Facility , ELO.
 - Sprinklers systems in the ammonia recovery facility and the incinerator room are not mentioned in the plan.
 - The BLEU facility is not mentioned in the plan.

An Inspector Followup Item (IFI) 70-1257/2006-005-003, was opened to track licensee actions.

Executive Summary (continued)

- The following Temporary Instruction (TI) 2600/012 items were reviewed:
 - IN-02-024, "Potential Problems with Heat Collectors on Fire Protection Sprinklers."
 - IN-99-028-S1, "Recall of Star Brand Fire Protection Sprinkler Heads."
 - IN-00-007, "National Institute of Occupational Safety and Health Respirator User Notice: Special Precautions for Using Certain Self-Contained Breathing Apparatus Air Cylinders."
 - IN-99-007, "Failed Fire Protection Deluge Valves and Potential Testing Deficiencies in Preaction Sprinkler Systems"

Based on interviews and observations the inspectors determined that the reviewed information notices were not applicable to the licensee.

Chemical Safety

- The inspectors reviewed and discussed the process safety information; and hazard identification and assessment information utilized by the licensee. The inspectors found the information use and availability for chemical safety system reviews to be adequate.
- The emergency preparedness program supporting the chemical safety processes was reviewed. The program updates were reviewed by the inspectors. The licensee plans to have the updates including the Pre-Emergency Plan completed during this calendar year.
- The inspectors reviewed the Safety Council Meeting minutes, the industrial hygiene audits of the chemical operations area, and the incident investigation process. The licensee's audits and inspections, and incident investigation review processes were adequate.
- The inspectors reviewed the beginning of the five year review of the integrated safety analysis (ISA) in the solvent extraction area. The licensee's review determined that there were areas of concern regarding criticality safety and that the system P&IDs were incorrect. The inspectors reviewed the systems, documentation and initial corrective actions taken with the licensee. The licensee initiated a root cause analysis process to determine what caused a missed criticality safety analysis during the initial ISA and its generic implications. An IFI, 70-15257/2006-05-05, was opened to track corrective actions and review the root cause analysis.
- The inspectors review of operating procedures determined there was a weakness in some procedures such as "GSUR Second Cycle Batch Dissolver" and "GSUR Continuous Feed Mop Powder Dissolver" which do not contain sufficient information such as valve numbers and system schematics to operate the system. Other procedures such as "Sodium Hydroxide Tank, Ammonium Carbonate Tank Procedures and Downloading Operation" do contain the information needed to operate a system. Schematics such as for the SWUR (Solid Waste Uranium Recovery) incinerator would provide operators and other persons such as ISA review teams with the information needed to assess and scope systems rather than relying on institutional knowledge or P&IDs which can be difficult to trace systems with for operational purposes. An IFI, 70-1257/2006-005-004, was opened to track the licensee's actions on procedure enhancements in general (not just the referenced procedures) to include schematics and sufficient detail to operate systems.
- The inspectors reviewed the training provided for chemical operators. The training provided is adequate. The training materials should be improved when the procedure and system schematic needs discussed above are provided.
- The following TI 2600/012 item was reviewed:
 - IN-90-070, "Pump Explosions Involving Ammonium Nitrate."

Based on interviews and a review of historical files, the inspectors determined that the information notice had been reviewed by the licensee's Ammonium Nitrate Hazards Committee and EMF-1486, *Ammonium Nitrate Safety Analysis*, was published in June 1992. The licensee's committee determined that most areas had adequate controls to preclude explosion but a few areas may have had inadequate controls and required equipment and/or administrative changes. Actions items were developed and enacted as a result of the review. The actions taken to review the inspection notice were acceptable.

Executive Summary (continued)Items Opened, Closed, and Discussed

| <u>Item Number</u> | <u>Status</u> | <u>Description</u> |
|--------------------|---------------|--|
| IFI 2006-002-001 | Closed | A small fire set off the fire alarm in the UNH processing room on February 19, 2006. The licensee has opened a Condition Report (2006-815-FA) and is awaiting the results of an offsite laboratory analysis of the burned matter. An Apparent Cause Analysis will be completed after the laboratory results are analyzed. |
| IFI 2006-002-002 | Open | A UF ₆ cylinder was rejected by client for leak at the valve threads. An empty cylinder was washed for a client, pressurized at a low pressure and shipped to a client's location. The cylinder arrived with no excess pressure and was declared defective. The licensee is awaiting evaluation and direction from the client. A Condition Report (2006-1506-FA) was prepared and will be completed upon direction from the client. |
| VIO 2006-005-001 | Open | Failure to properly implement software modifications that impact the functionality of the fire alarm. |
| VIO 2006-005-002 | Open | Failure to follow fire safety related procedures. |
| IFI 2006-005-003 | Open | Licensee actions regarding the up-date of the Pre-Fire Plan. |
| IFI 2006-005-004 | Open | Licensee actions regarding procedure enhancements to include schematics and sufficient detail to operate systems. |
| IFI 2006-005-005 | Open | Licensee actions regarding a missed criticality safety analysis. |

NOTICE OF VIOLATION

Areva NP, Inc.
Richland, WA

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

During an NRC inspection conducted May 15-25, 2006, violations of NRC requirements were identified. In accordance with NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions," the violations are listed below:

- A. 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 FANP conducts its business in accordance with a system of Standard Operating Procedures, Company Standards, and Policy Guides.

Contrary to the above, the licensee failed to conduct conducts its business in accordance with Standard Operating Procedures as described in the following examples:

1. Section 2.0 of SOP-40789 states in part, that all work performed using the Work Order (WO) process must not impact configuration control of the plant operations systems.

On July 2003, the licensee performed work using the Work Order process that impacted configuration control of the plant operations systems. Specifically, the licensee performed an activity using the WO process (WO B37491), which changed the software configuration of the fire alarm disabling the automatic fire door between the ADU line and the Dry conversion process.

2. Section 2.3 of the Engineering Change Notice procedure, MCP-30145, requires, in part that "Computer software installations or modifications shall be completed in accordance with EMF-1705, Manufacturing Software Quality Assurance Procedure (MSQAP)."

On April 19, 2006, the licensee performed a computer software modification of the fire alarm that was not in accordance with EMF-1705, MSQAP. As a result of the modification, the fire alarm automatic phone dialer was disabled until it was discovered during an activation of the fire alarm.

The above two examples a weakness in the licensee's implementation of configuration control and constitute a Severity Level IV violation (Supplement VI).

- B. 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 FANP conducts its business in accordance with a system of Standard Operating Procedures, Company Standards, and Policy Guides.

Contrary to the above, the licensee failed to conduct conducts its business in accordance with Standard Operating Procedures as described in the following examples:

1. Section 6 of MCP-30017 states in part that Fire Hazards Analyses must be reviewed/revalidated at least every five years.

Prior to may 19, 2006, the failed to review/revalidate four Fire Hazards Analyses at least every five years. Specifically, the licensee failed to review/revalidate the Fire Hazards Analyses for the UO2 Building, the Facility Support Storage Building, the Speciality Fuel Building, and the LUR/SPF Building.

2. Section 3 of Exhibit A of MCP-30039, states in part that all floor and wall openings near the operation have been tightly covered and a responsible person has been assigned to watch the dangerous sparks in the area, as well as floors above and below.

On February 18, 2006, the licensee failed to ensure that all floor and wall openings near the operation were tightly covered and a responsible person had been assigned to watch the dangerous sparks in the area, as well as floors above and below. Specifically, during a grinding activity in the lube blend room the licensee did not tightly cover the space beneath the door between the blend room and the powder dissolver room. In addition, the licensee did not watch for dangerous sparks in the area, as well as floors above and below allowing sparks from the grinding traveled under the door and starting a fire underneath the stairs in the neutralization area.

The above two examples constitute a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Areva NP, Inc. is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be made publically available, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld, and provide in detail the basis for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 20th day of June, 2006.