

Please see corrected copy of this inspection  
report under ADAMS accession no.  
ML060270563

January 6, 2006

NMED NO. (050618/EN 41998 and 050631)

Mr. Ronald J. Land  
Plant Manager  
Framatome ANP, Inc.  
2101 Horn Rapids Road  
Richland, WA 99352-0130

SUBJECT: NRC INSPECTION REPORT NO. 70-1257/2005-005

Dear Mr. Land:

This refers to the inspection conducted from November 28 through December 2, 2005, and December 5 - 9, 2005, at your Horn Rapids Road, 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 Forms 591, Parts 1 and 3, SAFETY INSPECTION REPORTS, are being issued. The enclosed forms indicates that no violations were identified during the above described inspection of your licensed activities. However, one non-cited violation was identified. The matter is considered closed and no further response is required. Please retain the forms 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>.

Mr. Ronald J. Land.

2

Thank you for your cooperation. If you have any questions concerning this letter, please contact me at (404) 562-4711.

Sincerely,

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

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

Enclosures: Form 591 Inspection Report, Parts 1 and 3

**SAFETY INSPECTION REPORT  
AND COMPLIANCE INSPECTION**

1. LICENSEE

Framatome ANP, Inc.  
2101 Horn Rapids Road  
Richland, WA 99352-0130

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) 70-1257/2005-005

3. DOCKET NUMBER(S)  
70-1257

4. LICENSE NUMBER(S)  
SNM-1227

5. DATE(S) OF INSPECTION  
11/28 -12/2 and 12/5 - 12/9/ (2005)

6. INSPECTOR(S): Jose Jimenez, Cynthia Taylor, Richard Gibson

7. INSPECTION PROCEDURES USED:88020, 83822, 88005, 86740  
Temporary Instructions: TI 2600/012 ( IN 99-030, IN 95-51, IN 89-003, IN 97-033, IN 86-077,)

SUPPLEMENTAL INSPECTION INFORMATION

**Executive Summary**

The Framatome 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, all operations were normal.

This was a routine, announced inspection that included observations and evaluation of the following programs: plant operations, radiation protection, management controls, and transportation. The inspection involved observations of work activities, reviews of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

**Plant Operations**

- Plant activities observed were performed safely and in accordance with license requirements. Housekeeping was adequate and no adverse affect on radiological safety or facility emergency egress was noted.
- Fuel manufacturing operations were conducted in accordance with approved operating procedures. The nuclear criticality safety training emphasized safety principles and practices.
- The licensee's configuration control system for facility modifications ensured that safety significant modifications were properly reviewed, approved, and documented.

**Executive Summary (Continued)**

**Plant Operations**

- The reviewed items relied on for safety were adequately implemented and maintained.
- The degradations of items relied on for safety and management measures were being identified, effectively communicated to managers, and resolved in a prompt manner.
- Functional test and calibration of the criticality alarm system were performed at the specified frequencies in accordance with approved procedures.
- The licensee's response to information notice (IN) 99-030 was reviewed in accordance with Temporary Instruction (TI) 2600/12 "Institutionalizing Concerns Regarding Safety Issues Identified In Selected Past Generic Communications."

**Radiation Protection**

- The licensee's self-assessments of the radiation protection program were implemented in accordance with the license and the regulatory requirements.
- The external exposure monitoring program was implemented in a manner to maintain doses as low as reasonably achievable. Exposures were less than the occupational limits in 10 CFR 20.1201.
- Internal exposures were significantly less than the limits of 10 CFR Part 20.1201.
- Respiratory protection equipment issuance and training assured that equipment was obtained by certified users only. The inspectors concluded that the licensee maintained adequate records for respiratory protection.
- Radiological safety postings and radiation job procedures were properly used to communicate potential hazards and protective requirements to workers.
- The radiation and contamination survey programs were appropriately implemented to protect workers, and to identify potential work areas posing an internal or external radiation hazard to workers.
- The licensee's As Low as Reasonable Achievable Program was properly implemented.

**Executive Summary (Continued)**

**Radiation Protection**

- The licensee's response to IN 95-051 was reviewed in accordance with TI 2600/12 "Institutionalizing Concerns Regarding Safety Issues Identified In Selected Past Generic Communications."

**Management Controls**

- The management changes met the license requirements for education and experience of personnel assigned those positions. Amendment 45 to the license was issued authorizing a substitution of applicable work experience for post-secondary education requirements for certain positions.
- Selected engineered changed notices concerning systems repairs and maintenance were reviewed. The changes were made approved by the appropriate management function in accordance with the licensee's configuration management system and license requirements. The licensee continues to migrate and centralize procedures into a new tracking and training system, "Documentum and Plateau."
- Transportation and Chemical Hygiene/Safety Plan program audit reports indicated that the licensee had implemented an effective and timely audit program .
- The licensee's implementation of the Safety Review Committee was adequate. The committee met at the required frequency and attendance met license requirements.
- The licensee's response to IN 86-077, 87-033 and 89-003 were reviewed in accordance with TI 2600/12 "Institutionalizing Concerns Regarding Safety Issues Identified In Selected Past Generic Communications."

**Transportation**

- The inspectors determined that activities associated with the packaging, classification, and shipments of pellets, scrap pellets and empty packages were performed in accordance with the current procedures and regulations.
- The licensee's transportation activities were in compliance with the applicable Nuclear Regulatory Commission (10 CFR Parts 20 and 71) and Department of Transportation (DOT) (49 CFR Parts 171-178) transport regulations.
- Current Certificates of Compliance (CoC) were on file and being properly implemented for the shipping containers used to transport fuel scrap, pellets or assemblies.

**Executive Summary (Continued)**

**Transportation**

- Shipping container maintenance was provided in accordance with the CoCs.
- Management controls for the packaging and transporting of radioactive materials were being implemented in accordance with the quality assurance and audit program.
- One non-cited violation (NCV) 70-1257/2005-005-05 was issued involving failure of the licensee to implement in-depth security training for hazmat employees.

**Events Reviewed**

- The inspectors reviewed NMED No. 050618/EN 41998 concerning a contamination event in an uncontrolled area. The licensee reported on September 18, 2005, that a spill occurred outside the Uranium Oxide (UO<sub>2</sub>) building from Room No. 197. During this time, the licensee stated that a heat test was performed on the K-58 deluge system located in Room No. 197. The test was scheduled for the smoke detector(s) in that room. The inspectors reviewed the licensee's corrective action reports for the spill recovery. After the spill clean up, resurvey results indicated smearable levels of less than 200 dpm per 100 sq cm for alpha and less than 500 dpm per 100 sq cm for beta and gamma. Direct readings after the spill clean up indicated 400 to 4000 dpm per 100 sq cm fixed alpha and 1400 to 3500 dpm per 100 sq cm fixed beta and gamma. The licensee applied clear coat epoxy to the wall beneath the drain line to the K-58 deluge system, and black asphalt paint to the ground to contain the fixed contamination. The licensee plans to apply additional painting soon. Based on this review, this event was closed.
- The inspectors reviewed NMED No. 050631 concerning an overturned flatbed truck just outside the plant entrance. The truck was carrying a Sealand container containing eighteen overpacks loaded with uranium oxide powder, packaged inside stainless steel buckets with stainless steel protective overpacks. The initial and completed investigations showed no visual radiation contamination or abnormal levels of radiation detected from the overturned shipment.

The inspectors reviewed the licensee's and contract carrier's internal investigations of the incident. Both parties concluded that the incident was caused by driver error stemming from excessive acceleration while still in the right turn maneuver, causing the trailer to overturn. The reviewed the licensee's corrective actions taken at the time of the incident. There were no issues identified.

**Executive Summary (Continued)**

**Events Reviewed**

The contract carrier committed to the following: (1) Developing a checklist regarding shipment of hazardous materials at the licensee's site to be reviewed by new and current drivers. (2) Including a lessons learned topic regarding the incident into their driver's orientation classes and (3) Implementing a decision driving training program with a goal of having their drivers take the training within 120 days. Based on this review, NMED No 050631 was closed.

**Inspector Follow-up Items (IFI)**

- In the plant operations area, IFI 70-1257/2005-05-01 was closed based on the review of the licensee's corrective actions taken to identify and resolve the laboratory cross check's bismuth standard. The licensee reported this issue several years ago and an IN 99-030, "Failure of Double Contingency Based on Administrative Controls Involving Laboratory Sampling and Spectroscopic Analysis of Wet Uranium Waste," was created. In addition, the IN was also identified in TI 2600/12 concerning past generic communication, for inspection follow-up.
- In the radiation protection area, the licensee did not have a written procedure to release areas or facilities from radiation protection requirements (i.e., contamination controls). The licensee acknowledged the finding and committed to taking immediate corrective actions in preparing a procedure. This issue will be tracked as IFI 70-1257/2005-05-02.
- In the transportation area, the licensee had not fully implemented the Hazardous Material Transportation Security Plan. Specially, the hazmat employees had not received in-depth training as stated in NCV 70-1257/2005-05-05 (see part one of this report. In addition, other departments were not aware of commitments made by the plan that affected their departments. The communication of the plan to affected departments will be tracked as IFI 70-1257/2005-05-03.
- The licensee's procedure SOP-40046 required performing removable contamination surveys on a frequency no less than that stated in the Action Levels and Monitoring Frequency Section. Intermediate area removable contamination surveys were required daily for alpha and beta-gamma emitters. The inspectors observed radiation safety personnel performed smears for removable alpha contamination only. The licensee stated that alpha contamination was the dominant concern from the UO<sub>2</sub> operations and that the beta-gamma contamination associated with the process was very negligible. The licensee committed to taking actions for procedure clarification and this issue will be tracked as IFI 70-1257/2005-05-04.

**Items Opened, Closed, And Discussed**

<u>Item Number</u>	<u>Status</u>	<u>Type</u>	<u>Description</u>
050618/41998	Closed	NMED	Unplanned Contamination Event
050631	Closed	NMED	Overtured Flatbed Truck
70-1257/2004-005-01	Closed	VIO	Failure to have modified procedure reviewed and approved by the relevant management functions.
70-1257/2005-005-01.	Closed	IFI	Laboratory cross check discrepancy
70-1257/2005-005-02	Opened	IFI	The licensee is to develop a written procedure to release areas or facilities from radiation protection requirements (i.e. contamination control).
70-1257/2005-005-03	Opened	IFI	The licensee had not fully communicated the Hazardous Materials Transportation Security Plan to affected departments.
70-1257/2005-005-04	Opened	IFI	The licensee is to provide procedure clarification for SOP-40046 regarding frequency for performing beta and gamma removable contamination surveys.
70-1257/2005-005-05	Opened/Closed	NCV	Failure to provide in-depth security training to hazmat employees.