UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

January 28, 2003

Mr. Robert E. Link, Site Manager
Framatome ANP, Inc.
2101 Horn Rapids Road
Richland, Washington 99352

SUBJECT: NRC INSPECTION REPORT 70-1257/03-01

Dear Mr. Link:

On January 6-10, 2003, the NRC conducted a routine inspection at the Framatome ANP facility in Richland, Washington. The purpose of the inspection was to determine whether activities authorized by your license were conducted safely and in accordance with NRC requirements. The program areas examined during the inspection were 1) management organization and controls, and 2) transportation. Within those areas, the inspection consisted of a selective examination of procedures, representative records, equipment, facilities and interviews with personnel. An exit briefing was conducted on January 10, 2003, with members of your staff.

Activities conducted at the facility were generally characterized by implementation of effective programs in the areas reviewed.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available **electronically** for public inspection in the NRC Public Document Room **or** from the *Publicly Available Records (PARS) component of NRC's document system (ADAMS).* ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, please contact Dr. D. Blair Spitzberg at (817) 860-8191 or Wayne Britz at (817) 860-8194.

Sincerely,

/RA DB Spitzberg acting for/

Ken E. Brockman, Director
Division of Nuclear Materials Safety

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

Enclosure:
NRC Inspection Report
70-1257/03-01

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	70-1257
License No.:	SNM-1227
Report No.:	70-1257/03-01
Licensee:	Framatome ANP, Inc.
Facility:	Framatome ANP, Inc.
Location:	Richland, Washington
Dates:	January 6-10, 2003
Inspector:	Wayne L. Britz, Fuel Cycle Facility Inspector Fuel Cycle/Decommissioning Branch
Approved By:	D. Blair Spitzberg, Ph.D., Chief Fuel Cycle/Decommissioning Branch
Attachment:	Supplemental Inspection Information

EXECUTIVE SUMMARY

Framatome ANP, Inc.
NRC Inspection Report 70-1257/03-01

This routine, announced inspection included a review of selected aspects of the licensee's program for 1) management organization and controls, and 2) transportation.

Management Organization and Controls (88005)

- Organizational changes made since the previous inspection of this area and the qualifications of affected personnel were in compliance with the license. The approval and responsibility matrix for procedure preparation, approval and concurrence were being followed. The audits reviewed contained good observations and findings, were thorough and were performed as required. The Environmental, Health and Safety Council scope of review was consistent with Section 2.2.1 of the license conditions. The nuclear criticality safety organization was observed to be auditing new installations and modifications to equipment and processes prior to their operation as required by the license. The licensee had developed and was implementing the procedures for the identification, review and followup on corrective action items for fuel transportation containers (Section 1).

Transportation (86740)

- Activities related to transportation of nuclear fuel were effectively performed. Documentation reviewed of nuclear fuel shipments was complete and contained all the required information. Personnel were knowledgeable of the requirements and their duties related to the preparation, packaging, and transportation of licensed material (Section 2).

Report Details

Summary of Plant Status

The dry conversion facility (DCF), fuel pellet production, fuel rod downloading, engineering laboratory operations (ELO), lagoon uranium recovery (LUR), ammonia recovery facility (ARF), gadolinium recovery, modular extraction/recovery facility (MERF), solids processing facility (SPF) and the solid waste uranium recovery (SWUR) were in operation. The Line 2 ammonium diuranate (ADU) recovery process was not in operation.

1 Management Organization and Controls (88005)

1.1 Inspection Scope

The inspector reviewed and discussed organization and staffing changes, internal reviews and audits, safety committee activities and quality assurance.

1.2 Observations and Findings

The inspector reviewed the recent facility organizational structure and personnel changes. Management changes during the past year include a new site manager; environmental health, safety & licensing manager; operations performance and planning manager (acting); training manager; and new personnel in the nuclear criticality safety group. The organization and qualifications of affected personnel were determined to be in compliance with Section 2.1, *Organizational Responsibilities and Authority,* of the license.

Procedural controls were reviewed for compliance with License Condition 2.4, *Operating Procedures, Standards and Guides*. Procedures and standard work instructions from several plant areas were reviewed. The approval and responsibility matrix for procedure preparation, approval and concurrence were being followed.

The inspector reviewed the audit requirements specified in the License Conditions, Section 2.1, *Organizational Responsibilities and Authority,* and Section 2.6, *Internal Audits and Inspections.* The inspector reviewed the monthly fire protection audits of selected facility areas required by Section 2.6.3 and the periodic hazardous chemical safety audits required by Section 2.6.5 of the license conditions. The hazardous chemical safety audits included the triennial process safety management/risk management program audit, the annual crane and hoist program review and the annual hazards communication review. The audits contained good observations and findings, were thorough and were performed as required.

License Section 2.2.1, *Environmental, Health and Safety Council,* provides for the Council to convene at least quarterly (the license condition was changed from monthly to at least quarterly) to review various aspects of the safety program. Designated Council members make monthly inspections of the facilities for housekeeping and safety practices and report the findings at the Council meetings. The inspector reviewed the reports of the monthly inspections for the past 6 months. The inspector found these reports to be an in-depth

review of overall health and safety issues and identification of problem areas. The Environmental, Health and Safety Council scope of review was consistent with Section 2.2.1 of the license conditions.

The periodic appraisal of the criticality safety management system required by the Safety Manual, EMF-30, Chapter 3, *Nuclear Criticality Safety Standards*, Section 9.3, *Criticality Safety Appraisal,* was last performed during November 1999 - January 2000. The inspector determined that the next appraisal would be performed during this calendar year.

License Condition 2.6.2, *Nuclear Criticality Safety,* required the nuclear criticality safety organization to audit new installations and modifications to equipment and processes prior to their operation with special nuclear material. The inspector observed the criticality safety engineer review the modification to the calciner powder drop in the ammonium diuranate scrap recovery system with the operations engineer and operators. The new system operation, procedure, safety features and changes were reviewed in detail. The system incorporated several additional equipment design safety features such as a transport cart placement limit switch and a weight limit switch to replace the reliance on administrative controls. The equipment and system was designed to eliminate previous compliance issues. Other improvements observed were the additional improved computer/process work stations. The nuclear criticality safety organization was observed to be auditing new installations and modifications to equipment and processes prior to their operation as required by the license.

The inspector reviewed the recertification testing and inspection of the uranium hexaflouride (UF_6) cylinders in accordance with standard operating procedure EMF-22, P66,1137, *Recertification Testing and Inspection of UF_6 Cylinders.* The quality inspector's qualifications to oversee the principal testing operation were reviewed and were on file as required by the procedure.

The inspector reviewed the licensee's procedures to identify, review and report operational events or off-normal operating conditions in the transportation of nuclear fuel. The inspector reviewed several procedures in the Quality/Management Systems' *Work Practices Manual*, EMF-2084. The *Work Practices Manual* supports the Quality Assurance Program's *Quality Management Manual* for the transportation audits required by 10 CFR Part 71. The *Quality Management Manual* was revised and approved by the NRC on June 14, 2002. The inspector reviewed the audits conducted of the shipping containers for transporting nuclear fuel in accordance with procedure P105-012, *Audits.* The audit completed in January 2003, was a 50 person-day audit. An auditor external to the company was on the audit team. An extensive set of criteria and checklists were used for the audit. The review determined that the program was implemented very well but also made several findings and observations. The licensee had developed and was implementing the procedures for the identification, review and followup on corrective action items for fuel transportation containers.

1.3 Conclusion

Organizational changes made since the previous inspection of this area and the qualifications of affected personnel were in compliance with the license. The approval and

responsibility matrix for procedure preparation, approval and concurrence were being followed. The audits reviewed contained good observations and findings, were thorough and were performed as required. The Environmental, Health and Safety Council scope of review was consistent with Section 2.2.1 of the license conditions. The nuclear criticality safety organization was observed to be auditing new installations and modifications to equipment and processes prior to their operation as required by the license. The licensee had developed and was implementing the procedures for the identification, review and followup on corrective action items for fuel transportation containers.

2 Transportation (86740)

a. Inspection Scope

The inspector interviewed licensee representatives responsible for radioactive material transportation, toured related facilities, and reviewed transportation records to determine if the licensee had established and maintained an effective program, and to determine whether transportation of licensed materials was in compliance with the applicable NRC and Department of Transportation (DOT) requirements.

b. Observations and Findings

The inspector observed the various stages of preparation for the receipt, inspection, packaging or shipment of UF_6 cylinders, NFI and ANF-250 drums, and SP-1 packages. Procedures EMF 695, P43,108, *Packing, Shipping and Receiving UO_2 Powder in NT-IX Shipping Containers,* and P43,085, *Loading, Shipping and Receiving UO_2 Pellets in ANF-250 Containers,* for the packaging of the NFI and ANF-250 drums were reviewed for compliance during the packaging. The inspector observed the required corrosive labels, radioactive labels, transportation index and numbered seals on the packages or truck,. The inspector discussed the preparation for shipment with the operators. Personnel were knowledgeable of the requirements and their duties.

Fuel package inspection, refurbishment and repair were observed on the model SP-1 and 51032-1 packages. The procedure for a weld repair on a key handling portion of a model 51032-1 container was observed, discussed, and the documentation papers were reviewed. The inspector also observed the receipt of a damaged UF_6 cylinder. The quality inspector was notified by the receiving operator. The quality inspector referred to ANSI N14.1-2001 to determine if the damage was reportable or not. The observed licensee inspections demonstrated the thoroughness of the inspection process.

The inspector reviewed the preparation of the shipping paper documentation with personnel in the Traffic and Logistics group. The overall guidance for the group is provided in *Shipping and Receiving of Radioactive Materials,* EMF-1861, P43-105. More detailed guidance is provided in a Guidelines Handbook. The Guidelines Handbook covers detailed information on UF_6 cylinders, various shipment container types, inspection services, fuel, pellets, radwaste, dangerous goods, hazardous materials, a checklist of the various forms that are to be included in shipments, manifests, export licenses, required permits, and NRC Forms 540, 541 and 741. The inspector reviewed shipping paper

documentation for five varied shipments (powder, pellets, fuel bundles) for domestic and international transport. The shipping papers included NRC Forms 741, 540, and 541, export license, certificate of compliance number, competent authority certificate number, bills of lading, package contamination surveys, driver's instructions and the 24-hour emergency contact number. The shipping records reviewed appeared detailed, complete and contained all the relevant information to comply with the transportation regulations.

The inspector reviewed the licensee's NRC Certificates of Compliance (COC) and DOT Competent Authority Certifications (CAC) for the various shipping containers. The certificates were on file for the containers currently in use. Current certificate revision numbers were observed in the shipping documentation reviewed.

c. Conclusions

Activities related to transportation of nuclear fuel were effectively performed. Documentation reviewed of nuclear fuel shipments was complete and contained all the required information. Personnel were knowledgeable of the requirements and their duties related to the preparation, packaging, and transportation of licensed material.

3 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on January 10, 2003. The licensee did not identify any of the information discussed at the meeting as proprietary.

ATTACHMENT

PARTIAL LIST OF LICENSEE PERSONNEL CONTACTED

Doug Adkisson, Manager, Fuel Operations
J. K. Davis, Principal Engineer, Licensing and Compliance
W. L. Doane, Nuclear Criticality Safety
Rich Gentz, Material Control/Logistics
Mike Koontz, Material Control/Logistics
Ron Land, Manager, Operations Performance and Planning
R. E. Link, Site Manager
S. R. Lockhaven, Industrial Hygiene
L. J. Maas, Manager, License and Compliance
C. D. Manning, Criticality Safety, Regulatory Compliance
K. A. Mitchell, Manager, Richland Site Quality
Bob Norman, Supervisor, Nuclear Material Shipping/Receiving
Mike O'Neill, Manager, Technical Support and Maintenance
D. W. Parker, Environmental, Health, Safety & Licensing
T. C. Probasco, Manager, Safety, Security, and Emergency Preparedness
Steve Schlax, Supervisor, Millwright Crafts
T. S. Wilkerson, Vice President Operations

INSPECTION PROCEDURES USED

88005	Management Organization and Controls
86740	Transportation

OPEN, DISCUSSED AND CLOSED ITEMS

Closed	None
Opened	None
Discussed	None

LIST OF ACRONYMS USED

<	less than
ADAMS	agencywide documents access and management systems
ADU	ammonium diuranate
ARF	ammonia recovery facility
CFR	Code of Federal Regulations
CAC	competent authority certification
COC	certificate of compliance
CSA	criticality safety analysis
CuFt	cubic feet
DCF	dry conversion facility
DOT	Department of Transportation
ELO	engineering laboratory operations

LUR	lagoon uranium recovery
MERF	modular extraction/recovery facility
NCS	Nuclear Criticality Safety
NMSS	Nuclear Material Safety and Safeguards
NRC	Nuclear Regulatory Commission
PDR	public document room
SNM	special nuclear material
SPF	solids processing facility
SWUR	solid waste uranium recovery
UO_2	uranium dioxide
UF_6	uranium hexafluoride
UO_2	uranium dioxide