UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

August 16, 2002

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

SUBJECT: NRC INSPECTION REPORT 70-1257/02-05

Dear Mr. Link:

On July 29 - August 2, 2002, 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 areas examined during the inspection included a review of the program for operational safety and radiation protection. Within these areas, the inspection consisted of a selective examination of procedures, representative records, equipment, facilities and interviews with personnel. An exit briefing was conducted on August 2, 2002, with members of your staff.

Activities conducted at the facility were generally characterized by implementation of effective programs in the area of operational safety and radiation protection.

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/ Charles L. Cain for

Dwight D. Chamberlain, Director
Division of Nuclear Materials Safety

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

Enclosure:
NRC Inspection Report
70-1257/02-05

cc w/enclosure:
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WLBritz		DBSpitzberg		DDChamberlain	
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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	70-1257
License No.:	SNM-1227
Report No.:	70-1257/02-05
Licensee:	Framatome ANP, Inc.
Facility:	Framatome ANP, Inc.
Location:	Richland, Washington
Dates:	July 29 - August 2, 2002
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 70-1257/02-05

This routine, announced inspection included a review of selected aspects of the licensee's program for operational safety and radiation protection.

Operational Safety (88020; TI 2600/003)

- Operations involving the processing of special nuclear material were in accordance with established safety requirements (Section 1).

Radiation Protection (83822)

- The licensee was adequately implementing the radiation protection program. The workers were observed to be following the requirements of the radiation protection program and were knowledgeable about the program requirements. All radiological doses were well below the 10 CFR Part 20 limits for individual workers and members of the public. The licensee met the applicable requirements set forth in the license, regulations and procedures (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, solid waste uranium recovery (SWUR), modular extraction/recovery facility (MERF), and the solids processing facility (SPF) were in operation. The Line 2 ammonium diuranate (ADU) recovery process was not in operation.

1 Operational Safety (88020; TI2600/003)

1.1 Inspection Scope

The inspector reviewed general facility operations to verify adherence to operational safety requirements documented in the license conditions and operating procedures.

1.2 Observations and Findings

The inspector observed general operations in the dry conversion facility and the UO_2 building. Work operations were observed and discussed with personnel. Areas where maintenance was performed were observed for their proper postings, work planning, maintenance and radiation work permits and protective clothing as required. The decommissioning of the dry conversion pilot plant was reviewed during its final stage of removal and cleanup. The inspector found the operations to be in conformance with the regulations and procedures.

The inspector observed control room operations in the DCF over two shifts. Operations involving the monitoring of criticality safety parameters and operations concerning radiological protection were reviewed. Plant operating conditions which require personnel to wear respiratory protection were observed. The operating procedure *Criticality Administrative Controls* was reviewed. The inspector observed the shift change turnover in the control room and in the powder prep area. The control room operations and the shift turnovers appeared adequate.

A re-formatted criticality safety specification card recently posted in the ceramics area was reviewed. The new criticality safety specification cards are larger, may contain photos and contain simplified text without compromising the information to be conveyed. The monthly criticality safety audits (CS-3) for January through June, 2002, were reviewed. The audits included selected areas for specific review and always included a review of those preventative maintenance (PM) and instrument repetitive maintenance (IRM) procedures which involved criticality safety equipment to assure the procedures were completed. The inspector followed up on the corrective actions which were generated as a result of the audits. The bi-annual criticality dosimetry inspection audit (HP-17) was reviewed. The results of the semi-annual criticality evacuation drill for both the graveyard and day shift were reviewed. The audits complied with License Condition 2.6, *Internal Audits and Inspections,* and License Condition 3.2.4.3, *Criticality Dosimeters.*

The improvements and use of the standard work instructions (SWIs) were observed in the miscellaneous uranium recovery system area (MURS) cleanup area, the mop neutralization station, the decontamination station and the MURS furnace area. The SWIs contain the important operating information on laminated pages with photographs and captions to alert the operator to important plant parameters during system operations. Five standard work instructions have been issued and several are in preparation. The standard work instructions should enhance the safety of operations for the future.

The physical condition of the safety equipment and the housekeeping in the DCF and UO_2 building were observed to be adequate.

1.3 Conclusions

Operations involving the processing of special nuclear material were in accordance with established safety requirements.

2 Radiation Protection (83822)

2.1 Inspection Scope

The radiation protection program was reviewed to ensure that operational controls were adequate to protect the health and safety of the workers and members of the general public. Portions of this radiological protection inspection module were reviewed in Inspection Report 70-1257/02-02 dated March 26, 2002.

2.2 Observations and Findings

The radiation protection program and procedures were reviewed for compliance with the license and the regulations. The audits of the radiation protection program conducted by the licensee's safety, security and licensing group in the areas of external dosimetry, airborne activity, contamination, radiation surveys, bioassays and dose tracking were reviewed and found to be thorough and detailed.

The inspector toured the dry conversion and UO_2 facilities observing postings, equipment, radiation instrument calibrations, surveys, radiological work and general conditions. The inspector reviewed radiation operations with radiation protection personnel. The inspector also reviewed the radiation protection program implementation in the plant. During the site tour, the inspector observed that radiation detection instruments were affixed with current calibration stickers. Employees were also observed monitoring themselves before leaving controlled areas.

Radiation protection personnel were observed checking fuel transport casks for radiation levels and affixing proper labels before shipment. Personnel were also observed checking a truck with radioactive waste prior to release from the site. The inspector found the personnel knowledgeable about the practical radiation protection programs, very thorough in their work and noted that the applicable radiation programs were being conducted in accordance with the regulations and procedures.

The inspector reviewed the 2001 annual as low as is reasonably achievable (ALARA) program as required by 10 CFR Part 20.1101(b) and (d), License Condition 2.2.2, *ALARA Committee* and License Condition 3.1.1, *ALARA Policy.* The licensee's annual ALARA Program Audit (HP-5) was reviewed. There were no significant changes in the occupational exposures during year 2001. The highest total effective dose equivalent (TEDE) in 2001 was 2.2 rem. The collective dose for 2001 was 105 man-rem. The maximum offsite dose due to gaseous releases during 2001 was 0.012 mrem. There was no liquid release dose pathway. All radiological doses were well below the 10 CFR Part 20 limits for individual workers and members of the public. The annual ALARA report was thorough and provided all the relevant data to determine that the site was maintaining radiological exposures to plant personnel and to members of the public as low as reasonably achievable.

The licensee's internal exposure control program and procedures were reviewed. The internal dose tracking system for tracking individual worker's entry and times into different plant areas and the use of respiratory protection equipment were reviewed. Data was recorded on probes at over 100 different areas and downloaded once per day into the database management system for evaluation. The use of lapel air samplers was reviewed. The necessity to use lapel air samplers has been reduced due to engineered controls in ceramics and increased ventilation flows in hoods.

The inspector reviewed the licensee's respiratory protection program required by 10 CFR Part 20, Subpart H, *Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas*, the licensee's EMF-30, Safety Manual, Chapter Two, Section 4.8, *Airborne Radioactivity Area, Respiratory Protection* and EMF-1508, 2.4, *Radiological Respiratory Protection Program.* The new medical facilities onsite were discussed. These facilities will house the respiratory fit test facility and replace the offsite facility. The annual respiratory protection audit/evaluation, dated May 23, 2002, was reviewed. This audit, required by Chapter One of the Safety Manual, was found to be thorough.

2.3 Conclusions

The licensee was adequately implementing the radiation protection program. The workers were observed to be following the requirements of the radiation protection program and were knowledgeable about the program requirements. All radiological doses were well below the 10 CFR Part 20 limits for individual workers and members of the public. The licensee met the applicable requirements set forth in the license, regulations and procedures.

3 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on August 2, 2002. The licensee did not identify any of the information discussed at the meeting as proprietary.

ATTACHMENT

PARTIAL LIST OF LICENSEE PERSONNEL CONTACTED

D. A. Adkisson, Richland Operations Manager
R. K. Burklin, Manager, Radiation Protection
J. M. Deist, Criticality Safety, Regulatory Compliance
R. E. Link, Site Manager
L. J. Maas, Manager, License and Compliance
C. D. Manning, Criticality Safety, Regulatory Compliance
D. Parker, Product and Transportation Plan
T. C. Probasco, Manager, Safety
T. J. Tate, Radiation Protection Supervisor
L. O. Washington, Supervisor, Ceramics

INSPECTION PROCEDURES USED

88020; TI 2600/003	Operational Safety
83822	Radiation Protection

OPEN, DISCUSSED AND CLOSED ITEMS

Opened

None

Discussed

None

Closed

None

LIST OF ACRONYMS USED

ADAMS	agencywide documents access and management systems
ADU	ammonium diuranate
ARF	ammonia recovery facility
ALARA	as low as is reasonably achievable
CFR	Code of Federal Regulations
DCF	dry conversion facility
ELO	Engineering Laboratory Operations Building
IRM	instrument repetitive maintenance
LUR	Lagoon Uranium Recovery
MERF	modular extraction/recovery facility
mrem	millirem
MURS	miscellaneous uranium recovery system
PM	preventative maintenance
Rem	Roentgen equivalent man
SPF	Solids Processing Facility
SS&L	Safety, Security and Licensing
SWI	standard work instruction
SWUR	Solid Waste Uranium Recovery facility
TEDE	total effective dose equivalent
UF_6	uranium hexafluoride
UO_2	uranium dioxide