



November 10, 2005  
REL:05:029

U. S. Nuclear Regulatory Commission  
Director, Office of Nuclear Material  
Safety and Safeguards  
Attn: Document Control Desk  
Washington, D.C. 20555

Gentlemen:

**Subject: Application for Amendment to License No. SNM-1227; Revised Qualification Criteria for Certain Safety Program Personnel**

By this application, Framatome ANP, Inc. is requesting revisions to the personnel qualification criteria for certain safety program personnel as described in Chapter 2, Organization and Administration, of Special Nuclear Material License SNM-1227. Specifically, the revised criteria apply to individuals responsible for the radiation protection and safety functions. The changes allow for increased flexibility in the assignment, utilization, and development of personnel responsible for these functions, while at the same time assuring that the assigned individuals possess the necessary expertise and experience to effectively administer these programs.

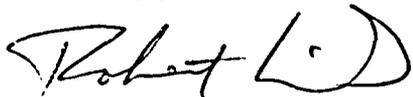
Attached, in support of this request, please find six copies of a revised Chapter 2 to FANP's License No. SNM-1227. The changes within Chapter 2 are as follows:

- In Section 2.1.5.2, the qualifications for the individual responsible for the radiation protection function have been revised to allow for the substitution of a defined experience level for a degree in science or engineering;
- In Section 2.1.5.3, the qualifications for the individual responsible for the safety function have been revised to allow for the substitution of a defined experience level for a degree in a technical field; and,
- In Section 2.6.5, the specific organizational title, "Emergency Preparedness, Industrial Safety and Security", has been generalized to "Safety Function", consistent with the discussions of other sub-functions within the Environmental, Health, Safety and Licensing component.

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As these requested changes may affect potential personnel actions, a timely ,  
expedited review is requested.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert Link". The signature is fluid and cursive, with the first name "Robert" written in a larger, more prominent script than the last name "Link".

R. E. Link, Manager  
Environmental, Health, Safety & Licensing

lmk

Enclosures

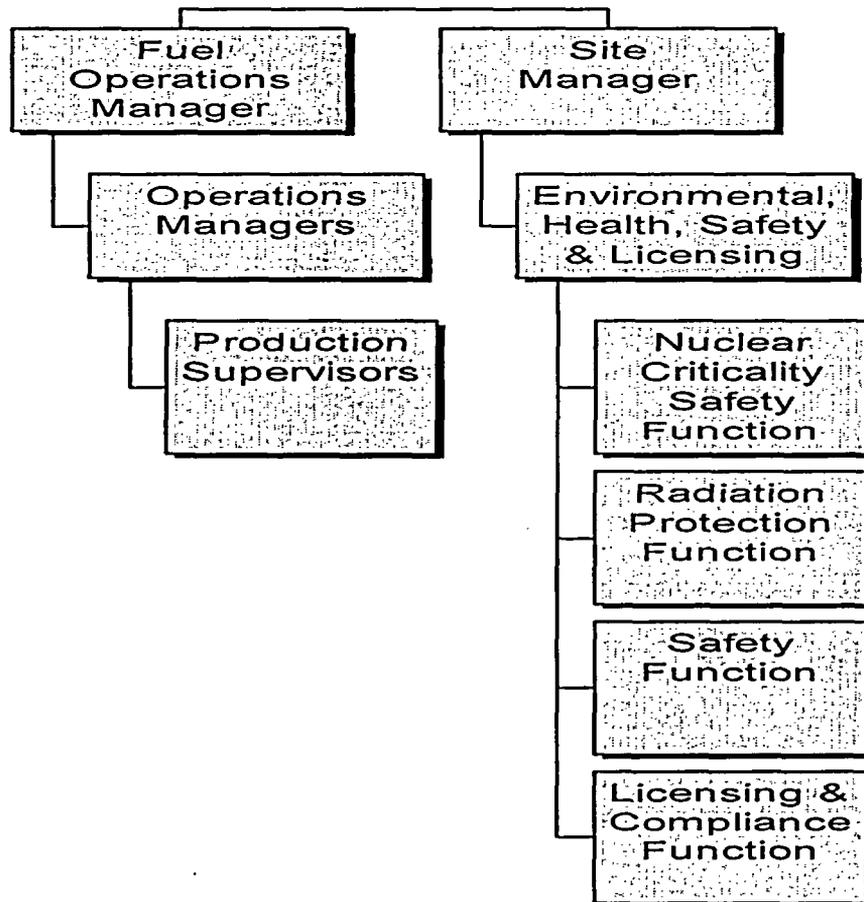
cc: M. N. Baker, USNRC

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### Chapter 2 Organization and Administration

The Senior Vice President, Framatome ANP, Inc. (FRA-ANP) has the ultimate responsibility for ensuring that all company operations are conducted in a manner that is protective of its workers, the public, and the surrounding environment, and remain in full compliance with applicable Federal, State, and local regulations, licenses, and permits. This is accomplished by putting in-place an effective on-site organization with defined accountabilities and assuring that the organization is given the authority and resources to meet its objectives. The primary components of that organization, their accountabilities, and the key administrative measures utilized to assure safe plant operations are described below. The organization is depicted below in Figure I-2.1. The responsibilities listed for the Fuel Operations Manager and the Site Manager may be combined into one functional position.

**Figure I-2.1**



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## **2.1 Organizational Responsibilities and Authority**

### **2.1.1 Site Manager**

The Site Manager has the overall responsibility for the licensing, safety, security, and other administrative functions associated with activities at the Richland site. These responsibilities shall be discharged by the:

- designation of defined responsibilities to qualified personnel; and
- establishment of mechanisms for the review of program effectiveness.

The Site Manager shall have a degree in science or engineering, a minimum of two years experience in the nuclear industry, and at least five years experience in management.

### **2.1.2 Fuel Operations Manager**

The Fuel Operations Manager has overall responsibility for the receipt, processing, storage, and transportation of the special nuclear material (SNM) utilized in the nuclear fuel fabrication and associated activities at the Richland Site. Inherent in that responsibility is assurance that the operations are conducted safely and in compliance with license conditions. Control shall be established by the:

- designation of defined responsibilities to qualified personnel, and
- prompt correction of nonconforming conditions.

The Fuel Operations Manager shall have a degree in science or engineering, a minimum of two years experience in the nuclear industry, and at least five years experience in management.

### **2.1.3 Operations Managers**

Operations managers have overall responsibility for nuclear fuel manufacturing activities involving SNM. Those activities entail the safe use and control of SNM from initial receipt, through all stages of processing, to ultimate shipment of product or process-related wastes. Technical support and maintenance activities directly supporting manufacturing are also included. This broad manufacturing authority, with regard to direct production activities, is conducted via a network of production supervisors overseeing trained workers who proceed in accordance with formal operating procedures. The technical support and maintenance activities are performed by appropriate engineering and technical staff.

Each operations manager shall have a degree in science or engineering and at least two years experience in the nuclear industry or a combination of education and experience judged appropriate by the Fuel Operations Manager.

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**2.1.4 Production Supervisors**

Production supervisors are directly responsible for the control of materials, personnel, equipment and activities in specific areas. These responsibilities include assuring that approved, formal procedures are available to and adhered to by operators and other applicable personnel.

Minimum qualifications for production supervisors shall include a high school education and two years experience in the nuclear industry. Experience shall include practical application of criticality control and radiological safety techniques and familiarity with applicable specific limitations imposed on production operations.

**2.1.5 Environmental, Health, Safety and Licensing (EHS&L) Component**

The EHS&L component has overall responsibility for the development and implementation of programs addressing worker health and safety, environmental protection, and licensing/permitting, including compliance with those licenses and permits. Technical EHS&L areas addressed within this overall function include nuclear criticality safety, radiation protection, environmental protection, integrated safety analysis, nuclear materials safeguards, industrial health and safety, emergency preparedness, fire protection, and security. This component's responsibility with respect to manufacturing operations is only to confirm the safety of those operations, but it has full authority to order shutdown and approve re-start of any such operations that are judged to be unsafe for continued operation.

The individual responsible for the EHS&L component shall have a degree in science or engineering with at least five years of experience which would develop an understanding of the health, safety, and environmental aspects of SNM processing activities.

**2.1.5.1 Nuclear Criticality Safety Function**

The nuclear criticality safety function has responsibility for the development and implementation of a comprehensive nuclear criticality safety program addressing all on-site SNM-utilizing processes, including (1) providing technical bases, criteria, and methods related to nuclear criticality safety; (2) preparing and updating FRA-ANP's Nuclear Criticality Safety Standards; (3) establishing criticality safety programs in accordance with pertinent criteria and standards; (4) performing and approving Criticality Safety Analyses for designs and procedures, including second-party reviews; (5) providing professional advice concerning matters within the component's cognizance; (6) performing compliance inspections; and (7) preparing Criticality Safety Specifications and Limit Cards.

All Criticality Safety Analyses shall be reviewed by a second party who shall be knowledgeable of the technical data and qualified in the techniques of criticality physics. Second party reviews shall be arranged by the nuclear criticality safety function, and may be

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either from within the component or by an outside reviewer. All Criticality Safety Analyses and reviews shall be documented, and documents shall be held until six months following the termination of the processes, equipment, or facilities to which they apply.

The individual responsible for the nuclear criticality safety function shall have a degree in science or engineering with at least three years experience in nuclear criticality safety analysis. The criticality analysts working in the nuclear criticality safety function shall have a degree in science or engineering and are subject to successfully completing a formal internal training and qualification program.

#### 2.1.5.2 Radiation Protection Function

The radiation protection function has responsibility for the development and implementation of a comprehensive program to limit personnel exposures to radiation in the conduct of manufacturing and manufacturing support activities. The radiation protection function includes the Health and Safety Technicians (HSTs) who perform the day-to-day radiological surveillance activities required in the plant, e.g. workplace air sampling, effluent sampling, and contamination surveys. The radiation protection function is also responsible for the plant ALARA program aimed at maintaining exposures to radiation and radioactivity in environmental effluents as low as reasonably achievable.

The individual responsible for the radiation protection function shall have a degree in science or engineering with at least three years experience in radiation protection programs. Alternatively, the individual responsible for the radiation protection function may have a high school diploma with a minimum of five years experience or training that provides a sufficient understanding of radiation protection principles and programs. The Health and Safety Technicians shall have a high school diploma or GED equivalent and are subject to successfully completing a formal internal training and qualification program.

#### 2.1.5.3 Safety Function

The safety function has responsibility for industrial safety/industrial hygiene, fire protection, and emergency preparedness. The individual responsible for the Safety Function has the authority to request management to shut down any operation judged to be unsafe for continued operation.

The individual responsible for the safety function shall have a degree in a technical field with at least two years experience in one or more of the safety disciplines included in this function. Alternatively, the individual responsible for the safety function may have a high school diploma with a minimum of five years experience or training that provides a sufficient understanding of one or more of the pertinent safety disciplines.

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**2.1.5.4 Licensing and Compliance Function**

The licensing and compliance function has overall responsibility for acquiring and maintaining environmental, health, and safety-related licenses and permits as required to operate the Richland facility. In this regard, the licensing and compliance function has first-line responsibility for interface with regulatory agencies relative to manufacturing-related activities. In addition to this role, this function has technical responsibility for the plant safeguards and environmental programs.

The individual responsible for the licensing and compliance function shall have a degree in a technical field with at least two years experience in the nuclear or general environmental, safety and health field.

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**2.2 Safety Review Committees**

**2.2.1 Environmental, Health and Safety Council**

FRA-ANP has established the Environmental, Health and Safety Council which convenes at least quarterly at FRA-ANP's fuel manufacturing plant in Richland, Washington, to review various aspects of the safety program, including:

1. Safety and environmental-related practices, trends and audit/inspection findings.
2. Emergency preparedness issues.
3. Overall safety awareness and attitude of employees and programs for promoting improvements.
4. Unusual occurrences and accident investigations.
5. Status of Council related action items.

This Council is chaired by the manager of the EHS&L component or his delegate who, with the Site Manager, determines the composition of the Council.

Designated members of the Council make monthly inspections of buildings and grounds for housekeeping and safety practices, and report the findings to the Council at the periodic meetings. A finding with significant safety implications is to be reported as soon as practicable to the operations manager responsible for the area in which the finding was identified. Findings are assigned to individuals for resolution and are held open until resolved.

**2.2.2 ALARA Committee**

An ALARA Committee maintains awareness of trends in employee radiation exposure and radioactivity content of effluent releases. The ALARA Committee shall convene at least semi-annually and shall issue a formal report at least annually to the Environmental, Health and Safety Council reviewing employee exposures and effluent release data to determine: 1) Trends in personnel exposures and effluents; 2) If personnel exposures or radioactive effluents might be lowered under the concept of ALARA; and 3) If equipment for effluent and exposure control is properly designed, used, maintained, and inspected.

Either the individual responsible for the radiation protection function or his delegate shall chair the ALARA Committee. The Committee shall include members of functional organizations affected by ALARA Committee actions.

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### **2.3 Training**

In addition to normal on-the-job training, employees shall be instructed in radiation protection and criticality safety requirements and procedures, industrial safety, fire protection, and emergency procedures. The degree of training shall be commensurate with each employee's position in the Company and with the extent of the employee's contact with licensed materials. The minimum safety-related training requirements shall be established by the EHS&L component.

#### **2.3.1 Initial Training**

Employees shall be provided initial training adequate to allow them to safely start on-the-job training. Prior to assignment to independent operation and as appropriate to their positions, employees are required to have been instructed in radiation protection, criticality safety, fire protection, hazardous chemical safety, emergency requirements, and operating procedures.

#### **2.3.2 Follow-up Training**

Each employee routinely working with SNM shall receive annual refresher training (including an examination) as part of FRA-ANP's continuing program in radiation protection and criticality safety awareness. When changes are made in radiation protection, criticality safety controls (procedures, specifications, etc.), or in emergency procedures, each employee affected shall be promptly informed and properly instructed.

#### **2.3.3 Health and Safety Technician Training**

Health and Safety Technicians shall be given special training related to their radiation protection and chemical safety assignments. The Health and Safety Technicians are required to become proficient in FRA-ANP's radiation protection program and to be aware of the requirements of the chemical safety and criticality safety programs. In addition, refresher training shall be provided to all Health and Safety Technicians annually.

### **2.4 Operating Procedures, Standards and Guides**

FRA-ANP conducts its business in accordance with a system of Standard Operating Procedures, Company Standards, and Policy Guides. The procedures and standards shall be reviewed and approved by the management of the functional component responsible for the activity described. Plant and functional managers are responsible for assuring compliance with all pertinent procedures, standards, and guides.

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**2.5 Configuration Control and Maintenance/Calibration of Safety-Related Equipment**

**2.5.1 Configuration Control**

FRA-ANP conducts a configuration control program to assure complete and proper reviews are undertaken prior to and after changes to facilities or equipment, particularly to those facilities or pieces of equipment used to handle or process licensed material. The program is implemented via FRA-ANP's Engineering Change Notice (ECN) procedure. FRA-ANP's configuration control program is more fully described in chapter 11.

**2.5.2 Maintenance and Calibration of Safety-Related Equipment**

FRA-ANP conducts a preventive maintenance (PM) program covering equipment, facilities, systems and support activities with emphasis on safety-related items. Preventive maintenance for testing or verification of a criticality safety function is identified by a unique numbering system and by an appropriate cautionary statement identifying it as being criticality safety related. In addition, within the FRA-ANP instrument calibration program, certain instruments related to safety are identified and may not be used beyond the calibration due date.

**2.6 Internal Audits and Inspections**

Audits and inspections shall be conducted to determine that plant operations are conducted in compliance with regulatory requirements, license conditions, and formal procedures. These audits and inspections apply to radiation protection, criticality safety, hazardous chemical safety, fire protection, and environmental protection.

**2.6.1 Radiation Protection**

Health and Safety Technicians shall perform daily inspections when the plant is in operation as a part of their normal work. Detected minor infractions of radiation protection procedures, exposure controls, and sound radiation protection practices may be corrected on-the-spot. Serious infractions and non-compliances with license conditions shall be documented and distributed to the respective functional management, and to the manager of the EHS&L component or their delegates.

The radiation protection function shall perform formal monthly audits of radiation protection practices and exposure controls. Results of these audits shall be documented, including any recommended corrective actions, and distributed to the respective functional management, and to the manager of the EHS&L component or their delegates. Corrective actions, until they are complete, shall be tracked and their status reviewed in subsequent audits.

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**2.6.2 Nuclear Criticality Safety**

The nuclear criticality safety function shall conduct monthly formal audits of the various plant systems or facilities where fissile materials are processed and stored. Reports of findings shall be submitted to the respective functional management, and to the manager of the EHS&L component or their delegates. These monthly audits shall be conducted such that each area of the plant is audited at least biennially. Corrective actions resulting from these audits shall be reviewed in subsequent audits until they are complete. The nuclear criticality safety function shall also audit new installations and modifications to equipment and processes prior to their operation with special nuclear material.

**2.6.3 Fire Protection**

The inspection committee of the Environmental, Health and Safety Council shall perform monthly inspections of selected areas of the Richland facility. These inspections shall include housekeeping and industrial safety conditions pertinent to fire protection. Results of these inspections shall be documented, including any recommended corrective actions, and distributed to the respective functional management. The corrective actions shall be reviewed during subsequent inspections until they are complete.

The safety function shall ensure that a monthly formal inspection is made of all plant fire extinguishers. Results of these inspections shall be documented, and any detected discrepancies corrected during the inspection or followed up on subsequent inspections.

**2.6.4 Environmental Protection Inspections**

The licensing and compliance function shall assure the implementation of effective monitoring programs to address the levels of regulated material released to the environment. Action levels and descriptions of actions to be taken as a result are found in FRA-ANP's plant Safety Manual. Results of this monitoring shall be documented and distributed to the manager of the EHS&L component or his delegate.

The radiation protection function shall perform quarterly formal inspections of environmental protection practices and exposure controls. Results of these inspections shall be documented, including any recommended corrective actions, and distributed to the respective functional management, and to the manager of the EHS&L component or their delegates. The corrective actions shall be reviewed in subsequent inspections until they are complete.

**2.6.5 Hazardous Chemical Safety**

The safety function shall conduct periodic inspections of all areas of the plant where hazardous chemicals which could affect licensed materials are stored, processed, or otherwise handled.

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Results of these inspections shall be documented, including any recommended corrective actions, and distributed to the respective facility management, and to the manager of the EHS&L component. Corrective actions resulting from these inspections shall be reviewed in subsequent inspections until there is satisfactory resolution.

**2.7 Investigations and Reporting**

Abnormal events requiring reporting under NRC regulations shall be investigated as appropriate, with results reported to plant management and NRC. The EHS&L component has the responsibility for investigating, reporting and following up on corrective actions resulting from reportable events until they are complete. Events not otherwise requiring a report may be reported to NRC based on potential public or media involvement, etc., in order to keep NRC apprised of the situation.

**2.8 Records**

Records documenting plant alterations or additions, abnormal occurrences, events associated with radioactive releases, criticality analyses, audits, inspections, instrument calibration, ALARA findings, employee training and retraining, personnel exposures, routine radiation surveys, and environmental surveys shall be maintained on file for a minimum of two years or as otherwise required by federal regulation or other license condition.

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