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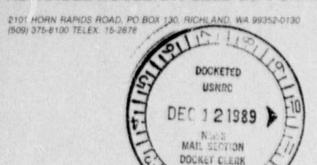
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ADVANCED NUCLEAR FUELS CORPORATION



J.S. Nuclear Regulatory Commission Attn: Mr. L. C. Rouse, Chief Fuel Cycle Safety Branch Division of Industrial & Medical Nuclear Safety Washington, DC 20555

License No. SNM-1227

December_

CWM: 89: 1130

Dear Mr. Rouse:

Advanced Nuclear Fuels Corporation (ANF) submitted application for amendment to License No. SNM-1227 by letter dated June 14, 1989. It has come to our attention that certain revised pages submitted in support of that application contained editorial errors. Enclosed are six copies of corrected pages to replace those containing the errors.

Very truly yours,

C. W. Malody, Manager Regulatory Compliance

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Enclosures As Stated

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SPECIAL NUCLEAR MATERIAL LICENSE NO. SNM-1227, NRC DOCKET NO. 70-1257

PART I - LICENSE CONDITIONS

REV.

CHAPTER 4 NUCLEAR CRITICALITY SAFETY

Nuclear criticality safety shall be assured through both administrative and technical practices. Administrative practices clearly include establishing the responsibilities for nuclear criticality safety, providing adequate and skilled personnel, preparing written standards and procedures, process analysis, materials and operational controls, operational and incident reviews, and emergency procedures. Technical practices include exercising control over the mass and distribution of significant quantities of special nuclear materials, and the mass, distribution, and nuclear properties of all other materials with which special nuclear materials are associated.

4.1 Administrative Conditions

The responsibilities and authorities for nuclear criticality safety are as described in Chapter 2 of this Application, as well as the professional requirements for criticality safety personnel.

4.1.1 Process Analyses (Critically Safe Determinations)

Before any operation with special nuclear material is begun or changed, it is determined that the entire process will be subcritical under both normal and credible abnormal conditions, and within the technical requirements specified in Section 4.2. Criticality safety analyses are performed on all applicable processes in accordance with Section 2.1.12, and all determinations of nuclear criticality safety are reviewed and approved by a second-party reviewer in accordance with the requirements specified therein.

Criticality safety analyses are performed and/or reviewed by Advanced Nuclear Fuels or contractor personnel who meet the professional requirements specified in Section 2.2.5.

Records of criticality safety analyses of processes shall be documented and retained in accordance with Section 2.1.12. Additionally, basic criteria, data, methods, and references pertaining to nuclear criticality safety shall be documented and retained in Company files by the Criticality Safety Component.

Operations, in which nuclear criticality safety is pertinent, are governed by written procedures, and all persons participating in these operations are required to be familiar with the procedures. Each major process step is described by a written Process Specification which, together with the respective Criticality Safety Specification (CSS), provides the basis for written Operating Procedures.

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PART II - SAFETY DEMONSTRATION

REV.

11.4 Operating Procedures

Plant operations are conducted according to written procedures. The procedures are written by the Manager, Plant Operations, or his designee. They are approved by the Manager, Plant Operations, Quality Control, Safety, Security, and Licensing, Equipment and Maintenance Engineering, and Process Support Engineering. These procedures include, by reference, appropriate Criticality Safety Specifications, Radiation Work Permits, and other safety-related, or pertinent, documents or procedures. The procedures are documented and issued by Document Control to appropriate personnel and locations. There are Mini-Libraries located within the various operating facilities which contain copies of the approved operating procedures for ease of access by operating personnel.

11.5 Training

11.5.1 Initial Training

Each employee is provided initial instruction adequate to allow them to safely start on-the-job training by his/her manager or supervisor. This initial instruction includes emergency procedures. If the employee routinely works with special nuclear material, radiation protection, and criticality safety, requirements and procedures will be included.

Within two weeks after starting work, full instruction in Standard Operating Procedures (including instrumentation and control, methods of dealing with process malfunctions, control of hazardous chemicals, control of contamination, and decontamination procedures), industrial safety, fire protection, emergency response procedures, radiation protection (including ALARA practices, nature and source of radiation, interactions of radiation and matter, biological effects of radiation, and the use of radiation monitoring equipment and step-off pad procedures), and criticality safety, requirements and procedures will be provided. The degree of training is commensurate with each employee's position in the Company (related to general and special responsibilities), and with the extent of the employee's contact with radioactive and fissionable materials. Employee instruction is provided by personnel knowledgeable in the various training topics.

Prior to assignment to independent operation, each employee is required, by signature, to indicate that he has been instructed in radiation protection, criticality safety, and emergency response requirements and procedures.

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PART II - SAFETY DEMONSTRATION

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11.6.4 Review/Concurrence/Approval

The ECN receives one approval, that by the User/Operator Manager. Prior to that approval, however, several other managers have reviewed and concurred with the package. Following sign-off by the review group, the ECN package is routed in accordance with the Approval and Responsibility Matrix (Figure 1-2.3).

11.6.5 Execution

Work begins upon receipt by either Maintenance or the Construction Engineer of copies of the fully approved ECN package issued by the Design and Drafting Clerk.

11.6.6 Acceptance

For projects <u>not</u> involving fissile material, acceptance of the work is documented by signatures of the Project Engineer, the Manager, Plant Maintenance, and the affected manager.

For projects involving fissile material, a physical review of the installation is made prior to introducing fissile material by a Criticality Safety Review Team, consisting of the Criticality Safety Component and the Project Engineer.

The Supervisor, Radiological and Industrial Safety, documents the team's approval by signing the ECN form.

11.6.6.1 Startup Council

A separate overview of certain projects is provided by a Startup Council prior to acceptance and operation of facilities, services, and equipment which have incurred significant change. Projects requiring Startup Council review are:

- Those having impact on production.
- Those with new safety issues or implications.
- New major projects (facilities/operations).
- Others as determined by the Chairman.

Membership of the Council consists of:

Chairman: Manager, Process & Equipment Engineering

Secretary: Manager, Equipment & Maintenance Engineering

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