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March 1, 1984

Docket Nos. 50-348
50-364

Director, Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. S. A. Varga

Joseph M. Farley Nuclear Plant - Unit 1 and 2
Charcoal Filter Technical Specifications

Gentlemen:

Alabama Power Company letter dated March 4, 1983 requested a technical specification change regarding charcoal filter surveillance testing. Subsequent discussions with the NRC Staff has resulted in an agreement to supplement the March 4, 1983 letter and revise some of the proposed technical specification changes. Contained herein is the supplemented technical specification change request and associated bases.

The current Farley Nuclear Plant Technical Specifications on charcoal filters have been difficult to interpret and contain references to testing standards that have been superseded by later editions. In an effort to clarify and update the technical specifications, Alabama Power Company proposes changes as described in Attachment 1 and contained in Attachment 2.

The proposed changes can be categorized as follows:

1. Incorporation of Specific Efficiency Requirements. The current technical specifications reference NRC Regulatory Guide 1.52, Revision 2, rather than stating specific filter efficiency requirements. Since Regulatory Guide 1.52, Revision 2, is difficult to interpret, the proposed technical specification change removes the regulatory guide reference and replaces it with specific efficiency values based on FSAR values and recent NRC interpretations. This change will ensure that the appropriate requirements are incorporated into the Farley Nuclear Plant testing procedures.

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2. Elimination of Surveillance Requirements for Non-Existent Farley Design Features. The current technical specifications are based on filter systems designed with filter bypass capability. Since the Farley Nuclear Plant design does not include filter bypass capability, the proposed change eliminates all filter bypass requirements.

3. Update of References to ANSI Standards. The current technical specifications reference ANSI N509-1976, "Nuclear Power Plant Air Cleaning Units and Components," and N510-1975, "Testing of Nuclear Air Cleaning Systems." The NRC has endorsed the use of ANSI N509-1980 and N510-1980 in the Standard Review Plan (NUREG-0800). The 1980 versions of these ANSI standards are, therefore, NRC approved updates of charcoal filter test methods. The proposed change references the 1980 standards and will update the charcoal filter testing methods at the Farley Nuclear Plant to reflect the latest guidance.

Based on the above and the detailed discussion contained in Attachment 1, Alabama Power Company proposes to make changes to the Farley Nuclear Plant Technical Specifications 3/4.7.7, 3/4.7.8 and 3/4.9.14 as contained in Attachment 2. Alabama Power Company's Plant Operations Review Committee has reviewed these proposed changes. The Nuclear Operations Review Board will review these proposed changes at a future meeting.

This proposed change does not involve a Significant Hazards Consideration as defined in 10CFR50.92. This change is similar to example (vi) of "Examples of Amendments That Are Considered Not Likely to Involve Significant Hazards Considerations" listed in 48FR14870 dated April 6, 1983. This change is similar in that the intent of all acceptance criteria are met as specified in the Standard Review Plan with respect to charcoal filters.

The class of this proposed change is designated as Class III for Unit 1 and Class I for Unit 2 in accordance with 10CFR170.22 requirements. A check for $4,400 to cover the total amount of fees required was included with the March 4, 1983 letter. In accordance with the 1984 Alabama Power Company licensing plan previously discussed with the NRC Staff, NRC approval of this change is requested by May 1, 1984.

In accordance with 10CFR50.90, three (3) signed originals and 40 additional copies of this proposed change are enclosed. As noted by the distribution, a copy of the letter is being sent to the Alabama State Designee in accordance with 10CFR50.91 (b)(1).

Yours very truly,

F. L. Clayton, Jr.

FLCJr/CJS:grs-D43
Attachments
cc: Mr. R. A. Thomas
Mr. J. P. O'Reilly
Mr. E. A. Reeves
Mr. W. H. Bradford
Dr. I. i. Myers

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 1st DAY OF MARCH, 1984

Notary Public

My Commission Expires: 10/27/85

ATTACHMENT 1

DISCUSSION OF PROPOSED CHANGES
TO FNP-1 AND 2 TECHNICAL SPECIFICATIONS
SECTIONS 4.7.7, 4.7.8, AND 4.9.14

Background Discussion

NRC Regulatory Guide 1.52, Revision 2, dated March 1978, provides recommended guidelines for testing requirements and acceptance criteria of safety-related filters. Testing of the Control Room Emergency Ventilation System and the Penetration Room Filtration System is performed in accordance with Technical Specifications 4.7.7 and 4.7.8 respectively. Testing of the Containment Purge Exhaust Filter is performed in accordance with Technical Specification 4.9.14. As written, these technical specifications do not fully reflect the appropriate testing requirements that should be implemented based on actual plant design. In addition, clarification of the requirements of Regulatory Guide 1.52, Revision 2, is necessary in order to assure proper implementation of the regulatory guide recommendations. Also, Regulatory Guide 1.52, Revision 2, references ANSI N509-1976 and ANSI N510-1975 as standards for testing air cleaning systems for nuclear power plants. These standards have been superseded by ANSI N509-1980 and ANSI N510-1980 and endorsed by the NRC in the Standard Review Plan (NUREG-0800). Therefore, a change to Farley Nuclear Plant Unit 1 and 2 Technical Specifications 4.7.7, 4.7.8 and 4.9.14 is requested to incorporate these improvements.

Discussion of Specific Changes

The following provides the bases for the proposed technical specification changes by paragraphs.

Technical Specification 4.7.7

Paragraph c.1: The Standard Technical Specifications (NUREG-0452) allow up to one percent leakage through a filter system if bypass piping is installed around the filters. Farley Nuclear Plant does not have filter bypass provisions, and therefore, total system leakage is equal to the leakage through the HEPA and charcoal absorbers (i.e., filter penetration for HEPA filters and bypass leakage through the absorber section for activated charcoal). When the filters are tested for penetration or leakage, the acceptance criteria of Regulatory Guide 1.52, Sections C.5.c and C.5.d, are applicable. This requires a filter penetration of less than 0.05 percent and a maximum of 0.05 percent bypass leakage through the adsorber section. As discussed with the NRC Staff, this criteria requires a 99.95 percent efficient filter which is overly restrictive. In accordance with recommendations

from the NRC Staff, the proposed testing acceptance criteria for filter penetration for Technical Specification 4.7.7.c.1 is less than or equal to 0.5 percent filter penetration or adsorber section bypass leakage (i.e., 99.5% efficient filter and absorber). Reference to Regulatory Guide 1.52, Revision 2, has been replaced with the specific testing requirements and acceptance criteria applicable to the FNP filters. In addition, reference to ANSI N510-1975 has been replaced with ANSI N510-1980, Sections 5, 10 and 12, for clarification in accordance with the Standard Review Plan.

Paragraph c.2: Reference to Regulatory Guide 1.52, Revision 2, has been replaced with specific testing requirements and acceptance criteria from the regulatory guide which is applicable to the FNP filters. Note 2 is proposed to clarify the efficiency limits for the charcoal filters. As stated in FSAR Section 9.4.1.6, the following efficiencies for the charcoal filters were assumed for the Post-LOCA control room doses:

a)	Control Room Recirculation Filter Unit	95.0%
b)	Control Room Filter	95.0%
c)	Control Room Pressurization (Inlet) Filter Unit	95.0%

In accordance with Regulatory Guide 1.52, Revision 2, in order to assume the above efficiencies, laboratory analyses must demonstrate the following efficiencies for the charcoal filters.

a)	Control Room Recirculation Filter Unit (2 inch sample size)	99.0%
b)	Control Room Filter Unit (2 inch sample size)	99.0%
c)	Control Room Pressurization (Inlet) Filter Unit (4 inch or greater sample size)	99.825%

Therefore, the laboratory analyses criteria are specifically stated in Technical Specification 4.7.7.c.2 rather than simply referencing Regulatory Guide 1.52.

Paragraph c.3: Reference to ANSI N510-1975 has been replaced with ANSI N510-1980, Section 8, for clarification in accordance with the Standard Review Plan.

Paragraph d: Same change and justification as provided above for changes to Paragraph 4.7.7.c.2.

Paragraph e.4: Reference to ANSI N510-1975 has been replaced with ANSI N510-1980, Section 14, for clarification in accordance with the Standard Review Plan.

Paragraph f: Same change and justification as provided above for changes to paragraph 4.7.7.c.1. regarding filter penetration testing.

Reference to ANSI N510-1979 has been replaced with ANSI N510-1980, Section 10, for clarification in accordance with the Standard Review Plan.

Paragraph g: Same change and justification as provided above for changes to paragraph 4.7.7.c.1. regarding filter penetration testing.

Reference to ANSI N.510-75 has been replaced with ANSI N510-80, Section 12, for clarification purposes.

Technical Specification 4.7.8

Paragraph b.1: Same change and justification as provided above for changes to Paragraph 4.7.7.c.1.

Paragraph b.2: Reference to Regulatory Guide 1.52, Revision 2, has been replaced with specific testing requirements and acceptance criteria from the regulatory guide which is applicable to the Farley Nuclear Plant filters. Accordingly, Section 13 of ANSI N510-1980 has been referenced for the testing requirements. With respect to the acceptance criteria, an efficiency of 90% was assumed for the charcoal filter in the spent fuel handling accident by the NRC confirmatory analysis described in the SER (NUREG-0117). In accordance with the regulatory guide, in order to assume this efficiency the laboratory analysis must demonstrate a charcoal efficiency of 95% (2 inch sample size).

Paragraph b.3: Reference to ANSI N510-1975 has been replaced with ANSI N510-1980, Section 8, for clarification in accordance with the Standard Review Plan.

Paragraph e: Same change and justification as provided above for changes to Paragraph 4.7.7.f.

Paragraph f: Same change and justification as provided above for changes to Paragraph 4.7.7.g.

Technical Specification 4.9.14

Paragraph a.1: This specification has been deleted because the Farley Nuclear Plant does not have bypass piping installed around the containment purge exhaust filters.

Paragraph a.2: Same change and justification as provided above for changes to Paragraph 4.7.7.c.1. This paragraph has been changed to be paragraph a.1.

Paragraph a.3: Reference to Regulatory Guide 1.52, Revision 2, has been replaced with ANSI N510-1980, Section 13, for clarification in accordance with the Standard Review Plan. The laboratory testing criteria of greater than or equal to 90% efficiency has been stated for clarification purposes and is in accordance with NRC Staff recommendations. A 90% efficiency acceptance criteria is extremely conservative since the fuel handling accident inside containment analysis assumed a 70% efficiency as stated in FSAR Section 15.4.5.2. This paragraph has been changed to be paragraph a.2.

Paragraph b: Same change and justification as provided above for changes to Paragraph 4.9.14.a.3.

Paragraph d: Same change and justification as provided above for changes to Paragraph 4.7.7.f.

Paragraph e: Same change and justification as provided above for changes to Paragraph 4.7.7.g.

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ATTACHMENT 2

Proposed Technical Specification Changes

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