



Southern Nuclear Operating Company
the southern electric system

J. D. Woodard
Vice President
Farley Project

April 29, 1993

Docket Nos. 50-348
50-364

10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Joseph M. Farley Nuclear Plant
Technical Specification Changes Associated With
Implementation of the New 10 CFR 20 Requirements

Gentlemen:

In response to your letter dated March 19, 1993, attached is the additional information you requested regarding Southern Nuclear Operating Company's (SNC) license amendment request dated August 24, 1992, as supplemented by letters dated December 17, 1992, and March 4, 1993, associated with implementation of the new 10 CFR 20 requirements at Farley Nuclear Plant. Attachment 1 contains your questions as numbered and worded in the March 19, 1993 letter, and our responses. Attachment 2 contains revised proposed technical specification changes associated with the responses. Hand marked and revised pages are included in Attachment 2, and supersede the corresponding pages provided in the December 17, 1992 submittal. The revised pages provided in the December 17, 1992, submittal were used for the hand markups. Additionally, the significant hazards evaluations contained in the August 24, 1992, and March 4, 1993, submittals are unaffected by the revised technical specification pages. The environmental evaluation provided in the August 24, 1992, submittal also remains applicable.

SNC requests that this amendment request together with the amendment request submitted in response to Generic Letter 89-01 by letter dated June 23, 1992, be approved as one single license amendment by September 1, 1993. It is also requested that the conditions of the license amendment be made effective upon implementation of the new 10 CFR 20 requirements by SNC but no later than January 1, 1994.

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Should you have any questions regarding this information, please contact this office.

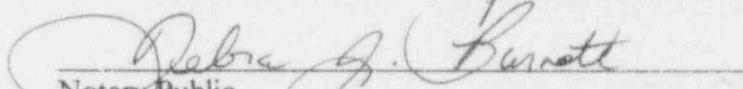
Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY


J. D. Woodard

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 29th DAY OF April 1993


Notary Public

My Commission Expires: 9-14-94

JDW/TMM

Attachments

cc: Mr. S. D. Ebner
Mr. T. A. Reed
Mr. G. F. Maxwell
Dr. D. E. Williamson

ATTACHMENT 1

Response to NRC Request for Additional Information

Dated March 19, 1993, Concerning

Implementation of the New 10 CFR 20 Requirements

Joseph M. Farley Nuclear Plant Units 1 and 2
Response to NRC Request for Additional Information Concerning
Implementation of the New 10 CFR 20 Requirements

Question 470.1

This question asked the licensee to revise the BASES section 3/4.11.1.4, LIQUID HOLDUP TANKS, to use a multiplier of "10 times" for the values of Appendix B, Table 2, Column 2 to 10 CFR Part 20.1001 - 20.2401.

The licensee responded by incorporating a multiplier of "ten times".

NRC response:

Subsequent to our issuance of the RAI, the staff determined that the use of the multiplier "10 times" for the values of Appendix B, Table 2, Column 2 to 10 CFR Part 20.1001 - 20.2401 was inappropriate for inclusion in the BASES section of the TS and should not be used.

The licensee should revise the BASES section to remove the words "ten times".

SNC response:

The proposed technical specification bases change submitted by Southern Nuclear Operating Company (SNC) letter dated December 17, 1992, regarding the Liquid Holdup Tanks (B 3/4.11.1.4), has been revised as shown in Attachment 2 by deleting the words "ten times". The significant hazards evaluation submitted by SNC letter dated August 24, 1992, as referenced in the December 17, 1992, submittal is unaffected by the proposed bases change.

Question 470.2

This question asked the licensee to remove, from "INSERT 3B", of the Administrative Controls, section e. Radioactive Effluent Controls Program, the phrase "which corresponds to a dose rate of 500 mrem/year total effective dose equivalent".

The licensee responded by removing the phrase from the body of the TS and added a footnote which states "At any time, ten times the concentrations stated in 10 CFR Part 20, Appendix B (to paragraphs 20.1001 - 20.2401), Table 2, Column 1, corresponds to a dose rate of 500 mrem/year total effective dose equivalent." The licensee maintains that this reference is needed as a clarifying statement for use in conjunction with their emergency preparedness procedures.

NRC response:

The use of this footnote as a clarifying statement for other licensee documents and which provides no additional control in the context of the TS is unacceptable. Additionally, the statement is not correct. The multiplier of 10 does not apply to radionuclides for which the major exposure pathway is from submersion. For those radionuclides with a "submersion" classification, the use of a multiplier of 10 would correspond to a dose rate of 1000 mrem/year total effective dose equivalent.

The licensee should be requested to remove the footnote.

SNC response:

SNC submittal dated March 4, 1993, resolves this issue whereby the dose rate methodology was selected in lieu of the concentration methodology for determining gaseous effluent release rate limits. Consequently, the footnote referenced above was removed, and proposed Farley Technical Specification 6.8.3.e(vii) was revised to maintain the current instantaneous dose rate limits for noble gases of 500 mrem/year to the total body and 3000 mrem/year to the skin; and for Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days, an instantaneous dose rate limit of 1500 mrem/year to any organ.

Question 470.3

This question asked the licensee to revise their Administrative Controls, section 6.12, High Radiation Area TS to acknowledge that there are three controls listed in 10 CFR 20.1601(a) versus only two listed in the TS.

The licensee responded that there is no change in the wording used in the new rule versus the old, so "since the regulatory requirements addressed by this TS have not changed, the wording need not be changed".

NRC response:

The licensee's response is acceptable. The request to revise the TS is withdrawn.

SNC response:

This issue is considered resolved. No further action is required by SNC.

Question 470.4

This question asked the licensee to revise their Administrative Controls, section 6.12, High Radiation Area TS to specify a range of greater than 1000 mrem in 1 hour but less than 500 rads in 1 hour, in order to distinguish it from the requirements for the Very High Radiation Area rule (20.1602).

The licensee responded that it is not necessary to specify a range because their TS already controls high radiation areas and "as a conservative measure", their TS "establish additional restrictions upon access to areas where an individual could receive a dose of 1000 mrem in a 1 hour period". The licensee concludes that "Therefore, although the requirements for controlling access to a high radiation area apply to a range from 100 mrem in 1 hour to 500 rads in 1 hour (very high radiation area), SNC imposes additional requirements for those high radiation areas which could result in a dose equivalent of greater than 1000 mrem in 1 hour".

NRC response:

The licensee's response that existing TS (TS 6.12, High Radiation Area) requirements encompass conservative controls necessary to comply with the requirements of 20.1602 is not correct. Their justification maintains that the "additional restrictions" imposed by their TS at the 1000 mrem in 1 hour are adequate to meet the "additional measures" required by the 20.1602, over those required in 20.1601. This is not correct. The high radiation area TS provides alternate methodology from the "locking" requirement specified in 20.1601, for areas in which "... an individual might receive a deep-dose equivalent of 0.1 rem in 1 hour at 30 centimeters from the radiation source ...". The locking requirement is imposed by the TS at 1000 mrem in 1 hour and above. This brings the TS into conformance with 20.1601. Therefore, it is not an "additional control" relative to 20.1602. Although there is no regulatory requirement to specify a dose rate range in the TS, the staff's approval cannot continue unless it is limited to less than 500 rads in 1 hour as required by the new Part 20. The controls specified by the licensee in the proposed TS (6.12) are not adequate to meet the "additional control" requirement specified in 20.1602.

The licensee is requested to specify a range of 1000 mrem in 1 hour but less than 500 rads in 1 hour, in order to distinguish it from the requirements of 20.1602.

SNC response:

To ensure that existing requirements for high radiation areas are not construed as self sufficient "additional controls" for a very high radiation area, SNC proposes changes to

Farley Technical Specification 6.12.2 as shown in Attachment 2. This change adds an upper limit for a high radiation area of 500 rads in one hour when measured at a distance of one meter from the radiation source or from any surface that the radiation penetrates. This change is consistent with 10 CFR 20.1602.

Question 470.5

This question asked the licensee to propose a TS that "specifies the measures to be taken to control access to very high radiation areas (e.g., a separate plant procedure, approved by the Plant Operations Review Committee, that establishes control requirements for very high radiation areas)".

The licensee responded that "the existence of a regulatory requirement does not necessarily dictate that a corresponding TS be written. SNC intends to comply without exception to the requirements specified in 10 CFR 20.1602 for controlling access to very high radiation areas; therefore, a specific TS ... is not needed". They add that "... specific regulatory guidance regarding the requirement to establish additional controls ... has not yet been provided". "However, as stated above, SNC has established restrictions ... to prevent entry into an area ... 1000 mrem within 1 hour. These precautions are in addition to those required for a high radiation area and bound the range defined for a very high radiation area".

NRC response:

The request to provide a TS for very high radiation areas is withdrawn. However, as discussed in Question 470.4, the controls specified by the licensee in the proposed TS (6.12, High Radiation Area) are not adequate to meet the "additional control" requirement called for in 20.1602.

SNC response:

As discussed in SNC's response to Question 470.4, Technical Specification 6.12 is being revised to specify the range of radiation received in a hour. With this change this issue is considered resolved and no further action is required by SNC.

ATTACHMENT 2

Revised Proposed Changes

to the

Farley Units 1 and 2

Technical Specifications

Farley Unit 1
Revised Proposed Changed
Technical Specification Pages

Revised Page

B 3/4 11-2*

6-22*

6-22a**

* Supersedes proposed changed technical specification page submitted by Southern Nuclear Operating Company letter dated December 17, 1992.

** New proposed changed technical specification page.