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ACTION



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 14, 1990

DA
JC

MEMORANDUM FOR: Edward L. Jordan, Chairman
Committee to Review Generic Requirements

FROM: Frank J. Miraglia, Deputy Director
Office of Nuclear Reactor Regulation

SUBJECT: WAIVER OF CRGR REVIEW OF PROPOSED GENERIC LETTER ON THE
REMOVAL OF THE SCHEDULE FOR THE WITHDRAWAL OF REACTOR VESSEL
MATERIAL SPECIMENS FROM TECHNICAL SPECIFICATIONS

*I don't see a problem
with the change. Please
advise*
EF

The NRC has issued Technical Specifications (TS) for the reactor coolant system pressure and temperature limits for some operating licenses without the table that provides the schedule for the withdrawal of reactor vessel material specimens. The inclusion of this schedule in the TS duplicates the requirements of Section II.B.3 of Appendix H to 10 CFR Part 50 for submitting a proposed withdrawal schedule and NRC approval before its implementation.

The regulations provide an acceptable means to control changes to the schedule for specimen withdrawal without the necessity of a license amendment that is required when the schedule is included in the TS. In addition, surveillance requirements in the TS ensure that material specimens are withdrawn at the proper time.

Enclosure 1 is a proposed generic letter to provide guidance on a license amendment request to remove the schedule for the withdrawal of reactor vessel material specimens from plant TS. This change is being proposed as a TS line-item improvement. Enclosure 2 is a draft memorandum to the Project Managers that encloses a copy of the generic letter and a model SER (Enclosure 3) for processing TS changes.

Because the proposed action involves a TS change for multiple plants, it is subject to CRGR approval. However, we recommend that CRGR waive the review for the following reasons:

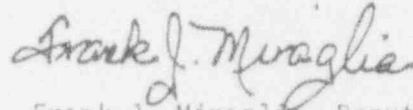
1. The changes described in the proposed Generic Letter do not alter TS surveillance requirements to remove material specimens at the proper time.
2. There are adequate regulatory controls for changing the specimen withdrawal schedule without including it in TS.
3. These actions are consistent with current practice and do not represent a new staff position. Enclosure 4 is the staff safety evaluation for this change for the Farley Units 1 & 2 TS.
4. Any licensee proposal to implement this TS change is voluntary.

Contact: T. Dunning, OTSB/DOEA
49-21189

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August 14, 1990

A response to our recommendation for waiving CRGR review is requested at your earliest convenience. If you find that CRGR review of this action is necessary, we will prepare a package for CRGR review. This action is sponsored by Charles E. Rossi, Director, Division of Operational Events Assessment.



Frank J. Miraglia, Deputy Director
Office of Nuclear Reactor Regulation

Enclosure:
As stated



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Enclosure 1

TO ALL HOLDERS OF OPERATING LICENSES OR CONSTRUCTION PERMITS FOR NUCLEAR
POWER REACTORS

SUBJECT: REMOVAL OF THE SCHEDULE FOR THE WITHDRAWAL OF REACTOR VESSEL MATERIAL
SPECIMENS FROM TECHNICAL SPECIFICATIONS (Generic Letter 90-)

Technical Specifications (TS) include Limiting Conditions for Operation (LCO) that establish pressure and temperature limits for the reactor coolant system. The limits are defined by TS figures that provide an acceptable range of operating temperatures and pressures for heatup, cooldown, criticality, and inservice leak and hydrostatic testing. These limits are generally valid for a specified number of effective full power years. A program for reactor vessel material surveillance ensures the availability of data to update the inservice operating pressure and temperature limits. Vessel material specimens are used to determine changes in material properties. This program will assist in fulfilling the requirements of Appendix H to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR) to prevent brittle fracture of the reactor vessel.

The surveillance requirements associated with these limits specify the withdrawal schedule for the reactor vessel material specimens. Recently, the staff of the U.S. Nuclear Regulatory Commission (NRC) approved a request to remove this schedule from the TS for the Joseph M. Farley Nuclear Plant. The basis for this TS change was that Section II.B.3 of Appendix H to 10 CFR Part 50 requires the submittal to, and approval by, the NRC of a proposed withdrawal schedule for material specimens prior to implementation. Hence, the placement of this schedule in the TS duplicates the controls on changes to this schedule that have been established by Appendix H. Therefore, the staff concluded that, because this duplication is unnecessary, the removal of this TS schedule as a line-item improvement is consistent with the Commission Policy Statement on TS Improvements.

The enclosed guidance addresses the preparation of a request for a license amendment for this TS change. Licensees and applicants are encouraged to propose changes to their TS that are consistent with the guidance in the enclosure. The NRC Project Manager for the facility will expeditiously review amendment requests that conform to this guidance. Please contact the Project Manager if you have questions on this matter.

Sincerely,

James G. Partlow
Associate Director for Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

GUIDANCE FOR THE REMOVAL OF THE WITHDRAWAL SCHEDULE FOR
REACTOR VESSEL MATERIAL SPECIMENS FROM TECHNICAL SPECIFICATIONS

INTRODUCTION

This enclosure provides guidance for the preparation of a request for a license amendment to remove from the Technical Specifications (TS) the schedule for the withdrawal of reactor vessel material surveillance specimens. The control of changes to this schedule by way of a license amendment to modify the TS duplicates the requirements of Section II.B.3 of Appendix H to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR) for the submittal of a proposed withdrawal schedule, as specified in 10 CFR 50.4, and NRC approval before its implementation.

DISCUSSION

The Limiting Conditions for Operation (LCO) for the reactor coolant system include operating limits on pressure and temperature that are defined by figures that provide an acceptable region for operation during heatup, cool-down, criticality, and inservice leak and hydrostatic testing. An associated surveillance requirement addresses the frequency for verifying that operation is within the specified limits during these operating conditions. In addition, the requirement for a separate surveillance includes the requirement that reactor vessel material surveillance specimens be removed and examined to determine changes in material properties, as required by 10 CFR Part 50, Appendix H, and in accordance with the schedule in the referenced table. The reference to this table should be deleted from this surveillance requirement along with the table providing the schedule for the withdrawal of reactor vessel material surveillance specimens. The requirement for this surveillance may also specify that the results of these examinations shall be used to update the TS figures for the pressure and temperature operating limits. If this requirement exists, it shall be retained.

The Bases for this TS provides a detailed description of the bases for this LCO and the associated surveillance requirements. The STS Bases reference the TS table that provides the schedule for surveillance specimen withdrawal and notes that the heatup and cooldown curves must be recalculated when data from the surveillance specimens indicate a change in material properties that exceeds those properties used to develop the existing pressure and temperature limits. Finally, the STS Bases include a table on the initial values of reactor vessel material properties and figures showing the effects of neutron fluence on material characteristics and predicted shifts in material characteristics.

The current STS Bases provides extensive background information on the use of the data obtained from material specimens and this clearly defines the purpose and relationship this information to the requirements included in the regulations and the ASME Code. Therefore, the removal of the schedule for specimen withdrawal from the TS will not result in any loss of clarity related to the regulatory requirements of Appendix H to 10 CFR Part 50.

If the Bases Section of this TS includes a reference to the TS table on the schedule for material specimen withdrawal that is being removed from the TS, this section should be updated to reflect the removal of this TS table.

However, to obtain a readily available copy of the NRC-approved version of the specimen withdrawal schedule, licensees should provide a commitment to include this schedule in the next revision of the Updated Safety Analysis Report (USAR).

SUMMARY

The removal of the schedule for reactor vessel material surveillance specimen withdrawal from the TS will not result in any loss of regulatory control because changes to this schedule are controlled by the requirements of Appendix H to 10 CFR Part 50. In addition, to ensure that the surveillance specimens are withdrawn at the proper time, the surveillance requirements for the TS on pressure and temperature limits must indicate that the specimens shall be removed and examined, to determine changes in material properties, as required by Appendix H. A request for a license amendment to remove this table from the TS may be made based upon this guidance. Licensees should include an updated STS Bases Section for this TS with this proposal if necessary to update references to the table being removed from the TS. Also, the licensee should commit to maintain the NRC-approved version of the specimen withdrawal schedule in the USAR.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Enclosure 2

MEMORANDUM FOR: All NRR Project Managers

FROM: James G. Partlow
Associate Director for Projects
Office of Nuclear Reactor Regulation

SUBJECT: GENERIC LETTER 90-

Enclosure 1 is Generic Letter 90- which provides guidance to licensees for a request for a license amendment to remove the table with the schedule for the withdrawal of reactor vessel material specimens from Technical Specifications (TS). Any proposal for this line-item TS improvement is voluntary.

Project Managers should review and process proposed license amendments conforming to the guidance of the generic letter. Generally, Project Managers need not consult or obtain review assistance from a technical review branch unless the proposed amendment deviates from the generic letter guidance.

Enclosure 2 is a model Safety Evaluation Report (SER) that was prepared by the Technical Specifications Branch. This model SER should facilitate your preparation of a license amendment to implement this line-item TS improvement. The Lead Project Manager for this task is _____ will assist you in the preparation of a no significant-hazards consideration (NSHC) pre-notice for a proposed amendment that conforms to the generic letter and should be included on distribution for the amendment package.

James G. Partlow
Associate Director for Projects
Office of Nuclear Reactor Regulation

Enclosures:

1. Generic Letter 90-
2. Model SER

cc: w/enclosures:

J. Sniezek
H. Thompson
Division Directors, NRR
Associate Directors, NRR
Project Directors, NRR
Regional Administrators
J. Conran, CRGR
C. Berlinger, DOEA
S. Treby, OGC

CONTACT:

T. Dunning, OTSB, NRR
492-1189

MODEL SAFETY EVALUATION REPORT

Underscored blank spaces are to be filled in with the applicable information. The information identified in brackets should be used as applicable on a plant-specific basis.

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. ___ TO FACILITY OPERATING LICENSE NFP-___
AND AMENDMENT NO. ___ TO FACILITY OPERATING LICENSE NFP-___
[UTILITY NAME]
DOCKET NOS. 50-___ AND 50-___
[PLANT NAME], UNITS 1 AND 2

INTRODUCTION

By letter of _____, 1990, [utility name] (the licensee) proposed a change to the Technical Specifications (TS) for [plant name]. The proposed change removes TS Table [4.4-5] providing the schedule for reactor vessel material specimen withdrawal. Guidance on the proposed TS change was provided by Generic Letter 90-___, of _____, 1990, to all holders of operating licenses or construction permits for nuclear power reactors.

EVALUATION

Technical Specification [3/4.4.9], "Pressure/Temperature Limits," contains a Limiting Condition for Operation for the Reactor Coolant System (RCS) that limits the rate of pressure and temperature changes to be consistent with the fracture toughness requirements of the ASME Code and Appendix G to 10 CFR Part 50. Changes to these limits are necessary because the fracture toughness properties of ferritic materials in the reactor vessel change as a function of the reactor operating lifetime (neutron fluence).

For this reason, the TS include a surveillance requirement, TS [4.4.9.1.2], to require the removal and examination of the irradiated specimens of reactor vessel material. The licensee will examine the specimens to determine the changes in material properties in accordance with Appendix H to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR). Table [4.4-5] is the list of material specimens and the schedule for removal of each specimen.

The removal of the schedule for withdrawing material specimens from the TS will eliminate the necessity of a license amendment to make changes to this schedule. However, Section I.B.3 of Appendix H to 10 CFR Part 50 requires the submittal to and approval by the NRC before implementation of a proposed withdrawal schedule for material specimens. Hence, the NRC has established adequate regulatory controls to control changes to this schedule without the necessity of subjecting it to the license amendment process by including it in TS.

The licensee has provided a commitment to include this schedule in the next revision of the Updated Safety Analysis Report (USAR). Any subsequent NRC-approved revisions to this schedule would also be included in an update of the USAR. Finally, the surveillance requirements for removing material specimens remain unchanged except for the removal of the reference to Table [4.4-5].

The licensee has proposed a change to Specification [4.4.9.2] that is consistent with the guidance provided in Generic Letter 90-___ for the removal of Table [4.4-5] from the TS. On the basis of its review of this matter, the staff finds that the proposed changes to the TS for (plant name) Unit(s) ___ are acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). The basis for this determination is that the removal of the schedule for removing material specimens from the TS does not alter the necessity for formal NRC approval of changes to the schedule as established by Section II.B.3 of Appendix H to 10 CFR Part 50. Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this(these) amendment(s).

CONCLUSION

The Commission made a proposed determination that the amendment(s) involve no significant-hazards consideration, which was published in the Federal Register (5 FR ___) on ____, 199_. The Commission consulted with the State of _____. No public comments were received, and the State of _____ did not have any comments.

On the basis of the considerations discussed above, the staff concludes that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Thomas G. Dunning, OTSB/DOEA
_____, PD ___/DRP ___

Dated: _____, 199_

(NOTE TO PMs: A copy of this model SER may be obtained from P. Coates, X-21161 by requesting 5520 Document: "MATERIAL SPECIMEN GL MODEL SER")



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 79 TO FACILITY OPERATING LICENSE NO. NPF-2
AND AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. NPF-8

ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-348 AND 50-364

1.0 INTRODUCTION

By letter dated January 28, 1988, as supplemented May 20, 1988, the Alabama Power Company submitted a request for changes to the Joseph M. Farley Nuclear Plant, Units 1 and 2, Technical Specifications.

The amendment deletes the Surveillance Specimen Withdrawal Schedule, Table 4.4-5 from the Technical Specifications (TS). Also, a portion of paragraph 4.4.10.1.2 relating to the reactor vessel material irradiation surveillance withdrawal table shall be removed and relocated to the Final Safety Analysis Report (FSAR). The program for surveillance of reactor vessel material would continue to be governed by 10 CFR Part 50, Appendix H.

2.0 EVALUATION

Technical Specification 3/4.4.1, "Pressure/Temperature Limits," contains a Limiting Condition for Operation for the Reactor Coolant System (RCS). Thus, the pressure and temperature changes in the RCS during heatup and cooldown are limited to be consistent with requirements of the ASME Code, Section III, Appendix G, 10 CFR Part 50. Changes to these limits are necessary since the fracture toughness properties of the ferritic materials in the reactor vessel change as a function of reactor operating lifetime (neutron fluence).

For this reason, a surveillance requirement, specifically TS Section 4.4.10.1.2, exists to require removal and examination of the reactor vessel material irradiation specimens. The specimen examination would be used to determine the changes in material properties in accordance with Appendix H, 10 CFR Part 50. Table 4.4-5 was the established list of specimens and the schedule for removal for each specimen.

The licensee initially proposed to delete TS Section 4.4.10.1.2 in its entirety. This deletion would have deleted Table 4.4-5 and the requirement for the removal, examination, and analysis of the test specimens. Also, the licensee proposed to add the specimen removal schedule to the next FSAR update. This action was completed in FSAR Revision 6, July

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1988, Table 5.4-14. Following discussions with the NRC staff, the licensee revised the earlier proposal by letter dated May 20, 1988, based on our concerns.

We have reviewed the licensee's revised proposal. The proposal will retain the portion of the TS Section 4.4.10.1.2 requiring removal, examination, and determination of changes in material properties required by Appendix H, 10 CFR Part 50. The change is considered acceptable for the following reasons:

1. The previously approved surveillance table is now contained in a licensee controlled document, the FSAR.
2. Pursuant to 10 CFR Part 50, Appendix H, changes to this previously approved schedule would require NRC staff approval.
3. The TS surveillance requirement is maintained to require removal, examination, and determination of changes in material properties pursuant to 10 CFR Part 50, Appendix H.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments change the surveillance requirements. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released off site; and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration, and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that this amendment involves no significant hazards consideration which was published in the Federal Register (53 FR 22398) on June 15, 1988, and consulted with the State of Alabama. No public comments or requests for hearing were received, and the State of Alabama did not have any comments.

The Staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: E. Reeves

Dated: August 22, 1988