

December 4, 1986

Dockets Nos. 50-259/260/296

Posted
Amnt 127
to DPR-52

Manager of Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37401

Dear Sir:

The Commission has issued the enclosed Amendments Nos. 131, 127, and 102 to Facility Operating Licenses Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3. These amendments are in response to your application dated February 24, 1986 (TVA BFNP TS 218).

The amendments change the Technical Specifications to expand the structural integrity specification to include the balance of ASME Code Class 1, 2 and 3 equivalent systems.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Original signed by

Marshall Grotenhuis, Project Manager
BWR Project Directorate #2
Division of BWR Licensing

Enclosures:

1. Amendment No. 131 to License No. DPR-33
2. Amendment No. 127 to License No. DPR-52
3. Amendment No. 102 to License No. DPR-68
4. Safety Evaluation

cc w/enclosures:
See next page

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Docket File	RBenerno
NRC PDR	SNorris
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NGrace, RII	TAlexion
SWeise, RII	RWessman
GZech, RII	MGrotenhuis

LSpessard, DI	FCantrell, RII
SRConnelly, OIA	GGears
BJYoungblood	

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DBL:PD#2 SNorris: 11/24/86	DBL:PD#2 GGears 11/24/86	DBL:PD#2 MGrotenhuis 11/24/86	OGC - Bethesda Johnson 11/26/86	DBL:PD#2:D DMutler 12/3/86
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Manager of Nuclear Power
Tennessee Valley Authority

Browns Ferry Nuclear Plant
Units 1, 2, and 3

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 131
License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 24, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-33 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 131, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Daniel R. Muller", is written over the typed name.

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 131

FACILITY OPERATING LICENSE NO. DPR-33

DOCKET NO. 50-259

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

Pages

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3.6.G Structural Integrity

1. The structural integrity of ASME Code Class 1, 2, and 3 equivalent components shall be maintained in accordance with Specification 4.6.G throughout the life of the plant.
 - a. With the structural integrity of any ASME code Class 1 equivalent component, which is part of the primary system, not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or maintain the reactor coolant system in either a cold shutdown condition or less than 50°F above the minimum temperature required by NDT considerations, until each indication of a defect has been investigated and evaluated.
 - b. With the structural integrity of any ASME Code Class 2 or 3 equivalent component not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or isolate the affected component from all operable systems.

4.6.G Structural Integrity

1. Inservice inspection of ASME Code Class 1, Class 2, and Class 3 components shall be performed in accordance with Section II of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by NRC pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).
2. Additional inspections shall be performed on certain circumferential pipe welds as listed to provide additional protection against pipe whip, which could damage auxiliary and control systems.

Feedwater - CFV-9, CFV-13,
CFV-14, CFV-23,
KFW-31, CFV-29,
KFW-19, CFV-15,
KFW-38, and CFV-32

Main steam - GMS-6, GMS-24,
GMS-32, GMS-104,
GMS-15, and GMS-26

RHR - DSRHR-6, DSRHR-7,
DSRHR-8A

Core Spray - DSCS-12, DSCS-11,
DSCS-3, and DSCS-4



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 127
License No. DPR-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 24, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-52 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 127, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Daniel R. Muller".

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 127

FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

Pages

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LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENT

3.6.G Structural Integrity

1. The structural integrity of ASME Code Class 1, 2, and 3 equivalent components shall be maintained in accordance with Specification 4.6.G throughout the life of the plant.
 - a. With the structural integrity of any ASME code Class 1 equivalent component, which is part of the primary system, not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or maintain the reactor coolant system in either a cold shutdown condition or less than 50°F above the minimum temperature required by NDT considerations, until each indication of a defect has been investigated and evaluated.
 - b. With the structural integrity of any ASME Code Class 2 or 3 equivalent component not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or isolate the affected component from all operable systems.

4.6.G Structural Integrity

1. Inservice inspection of ASME Code Class 1, Class 2, and Class 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by NRC pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).
2. Additional inspections shall be performed on certain circumferential pipe welds as listed to provide additional protection against pipe whip, which could damage auxiliary and control systems.

Feedwater	-	CFW-9, CFW-13 CFW-12, CFW-25, CFW-31, CFW-29, CFW-39, CFW-15, CFW-38, and CFW-32
Main steam	-	CMS-6, CMS-24, CMS-32, CMS-104 CMS-15, and CMS-20
RHR	-	DSRHR-4, DSRHR-7, DSRHR-6
Core Spray	-	TCS-407 TCS-423 TSCS-408 TSCS-424



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 102
License No. DPR-68

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 24, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-68 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 102, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Daniel R. Muller", is written over the typed name.

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 102

FACILITY OPERATING LICENSE NO. DPR-68

DOCKET NO. 50-296

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

Pages

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LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

PRIMARY SYSTEM BOUNDARY

3.6.G Structural Integrity

1. The structural integrity of ASME Code Class 1, 2, and 3 equivalent components shall be maintained in accordance with Specification 4.6.G throughout the life of the plant.
 - a. With the structural integrity of any ASME code Class 1 equivalent component, which is part of the primary system, not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or maintain the reactor coolant system in either a cold shutdown condition or less than 50°F above the minimum temperature required by NDT considerations, until each indication of a defect has been investigated and evaluated.
 - b. With the structural integrity of any ASME Code Class 2 or 3 equivalent component not conforming to the above requirements, restore the structural integrity of the affected component to within its limit or isolate the affected component from all operable systems.

4.6 PRIMARY SYSTEM BOUNDARY

G. Structural Integrity

1. Inservice inspection of ASME Code Class 1, Class 2, and Class 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by NRC pursuant to 10 CFR 50, Section 50.55a(3)(6)(i).
2. Additional inspections shall be performed on certain circumferential pipe welds as listed to provide additional protection against pipe whip, which could damage auxiliary and control systems.

Feedwater- GFW-9, KFW-13,
GFW-12, GFW-26,
KFW-31, GFW-29,
KFW-39, GFW-15,
KFW-30, and GFW-32



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 131 TO FACILITY OPERATING LICENSE NO. DPR-33
AMENDMENT NO. 127 TO FACILITY OPERATING LICENSE NO. DPR-52
AMENDMENT NO. 102 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

DOCKETS NOS. 50-259, 50-260 AND 50-296

1.0 INTRODUCTION

By letter dated February 24, 1986, (TVA BFNP TS 218), the Tennessee Valley Authority (the licensee or TVA) requested amendments to Facility Operating Licenses Nos. DPR-33, DPR-52, and DPR-68 for the Browns Ferry Nuclear Plant (BFN). The applications by TVA were in response to a request by the NRC staff on April 30, 1984, to revise the Technical Specifications (TS) of Browns Ferry Nuclear Plant Units 1, 2, and 3 to include not only the primary system but, also the balance of ASME Code Class 1, 2 and 3 equivalent systems in the requirement to maintain structural integrity through inservice inspection.

The amendments would replace the Limiting Condition for Operation (LCO) 3.6.G of BFN Units 1, 2 and 3 technical specifications, to expand applicability to include not only the primary coolant boundary but, also the balance of ASME Code Class 1, 2 and 3 equivalent systems.

2.0 EVALUATION

The regulations for inservice inspection (10 CFR 50.55a(g)) were changed on February 27, 1976, to require that facility inservice inspection (ISI) programs be periodically updated to later editions of the ASME, Boiler and Pressure Vessel Code, Section XI. In order to eliminate conflicts between ISI requirements in the TS and those specified by regulations, 10 CFR 50.55a(g)(5)(ii) requires that TS be changed to reference 10 CFR 50.55a rather than contain details of specific ISI program. The surveillance requirement for ISI has already been revised to include this reference by BFN amendment numbers 98, 92, and 65. Revising the LCO as described here will provide additional clarification and broaden the requirements of LCO 3.6.G to be similar to Standard Technical Specifications (STS).

3.0 SUMMARY

The staff has reviewed the licensee's submittal dated February 24, 1986. Based on our review we find that the proposed amendments are in accordance with the guidance provided by the staff in its April 30, 1984 letter, as well as the Section 3.4.8 of the Standard Technical Specifications for BWRs (NUREG-0123, Rev. 3, Dec. 1980). Therefore, we find the proposed proposed changes acceptable.

4.0 ENVIRONMENTAL CONSIDERATIONS

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there should be no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the 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 the amendments.

5.0 CONCLUSION

We have 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: H. F. Conrad

Dated: December 4, 1986