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PostEd Amd1.122 to DPR-52

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

Dear Mr. White:

Docket Nos. 50-259

The Commission has issued the enclosed Amendment Nos. 127, 122 and 98 to Facility Operating License 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 November 5, 1985 (TVA BFNP TS 214) which supersedes a similar request in an earlier application dated December 21, 1984.

The amendments change the Technical Specifications to add a requirement for plant procedures to limit overtime worked by plant staff in accordance with NRC policy. This action satisfies the guidance of NUREG-0737 Item I.A.1.3 for overtime limitations.

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

Sincerely,

Original signed by Richard J. Clark

Richard J. Clark, Project Manager BWR Project Directorate #2 Division of BWR Licensing

Enclosures:

Amendment No. 127 to

License No. DPR-33 Amendment No. 122 to

License No. DPR-52

Amendment No. 98 to License No. DPR-68

Safety Evaluation

cc w/enclosures: See next page

H-Thompson DVassallo ~ DISTRIBUTION: RBernero M. Grotenhuis Docket File SNorris ELJordan OPA, CMiles LFMB/WTAC NRC PDR RC1ark **BGrimes** TBarnhart (12) Local PDR WLong Gray File Extra - 5 PD#2 Reading 0ELD **WJones**

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LJHarmon

Mr. S. A. White 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. 127 License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:

1

- A. The application for amendment by Tennessee Valley Authority (the licensee) dated December 21, 1984, as superseded November 5, 1985 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and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.
- 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. 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 ninety days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment: Changes to the Technical Specifications

Date of Issuance: February 26, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 127 FACILITY OPERATING LICENSE NO. DPR-33 DOCKET NO. 50-259

Revise Appendix A as follows:

1. Remove the following pages and replace with identically numbered pages.

338

2. The marginal lines on these pages denote the area being changed.

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6.0 ADMINISTRATIVE CONTROLS

6.3 Procedures

- A. Detailed written procedures, including applicable checkoff lists covering items listed below shall be prepared, approved and adhered to.
 - Normal startup, operation and shutdown of the reactor and of all systems and components involving nuclear safety of the facility.
 - 2. Refueling operations.
 - 3. Actions to be taken to correct specific and foreseen potential malfunctions of systems or components, including responses to alarms, suspected primary system leaks and abnormal reactivity changes.
 - 4. Emergency conditions involving potential or actual release of radioactivity.
 - 5. Preventive or corrective maintenance operations which could have an effect on the safety of the reactor.
 - Surveillance and testing requirements.
 - 7. Radiation control procedures.
 - 8. Radiological Emergency Plan implementing procedures.
 - 9. Plant security program implementing procedures.
 - 10. Fire protection and prevention procedures.
 - 11. Limitations on the amount of overtime worked by individuals performing safety-related functions in accordance with the NRC policy statement on working hours (Generic Letter No. 82-12).
- B. Written procedures pertaining to those items listed above shall be reviewed by PORC and approved by the plant superintendent prior to implementation. Temporary changes to a procedures which do not change the intent of the approved procedure may be made by a member of the plant staff knowledgeable in the area affected by the procedure except that temporary changes to those items listed above except item 5 require the additional approval of a member of the plant staff who holds a Senior Reactor Operator license on the unit affected. Such changes shall be documented and subsequently reviewed by PORC and approved by the plant superintendent.



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. 122 License No. DPR-52

The Nuclear Regulatory Commission (the Commission) has found that:

3

- A. The application for amendment by Tennessee Valley Authority (the licensee) dated December 21, 1984, as superseded November 5, 1985 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.
- 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 122, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective ninety days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment: Changes to the Technical Specifications

Date of Issuance: February 26, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 122 FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Revise Appendix A as follows:

1. Remove the following pages and replace with identically numbered pages.

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2. The marginal lines on these pages denote the area being changed.

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6.0 ADMINISTRATIVE CONTROLS

6.3 Procedures

- A. Detailed written procedures, including applicable checkoff lists covering items listed below shall be prepared, approved and adhered to.
 - Normal startup, operation and shutdown of the reactor and of all systems and components involving nuclear safety of the facility.
 - 2. Refueling operations.
 - 3. Actions to be taken to correct specific and foreseen potential malfunctions of systems or components, including responses to alarms, suspected primary system leaks and abnormal reactivity changes.
 - 4. Emergency conditions involving potential or actual release of radioactivity.
 - 5. Preventive or corrective maintenance operations which could have an effect on the safety of the reactor.
 - 6. Surveillance and testing requirements.
 - 7. Radiation control procedures.
 - 8. Radiological Emergency Plan implementing procedures.
 - 9. Plant security program implementing procedures.
 - 10. Fire protection and prevention procedures.
 - 11. Limitations on the amount of overtime worked by individuals performing safety-related functions in accordance with the NRC policy statement on working hours (Generic Letter No. 82-12).
- B. Written procedures pertaining to those items listed above shall be reviewed by PORC and approved by the plant superintendent prior to implementation. Temporary changes to a procedures which do not change the intent of the approved procedure may be made by a member of the plant staff knowledgeable in the area affected by the procedure except that temporary changes to those items listed above except item 5 require the additional approval of a member of the plant staff who holds a Senior Reactor Operator license on the unit affected. Such changes shall be documented and subsequently reviewed by PORC and approved by the plant superintendent.



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. 98 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 December 21, 1985, as superseded November 5, 1985, 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.
- 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 98, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective ninety days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment: Changes to the Technical Specifications

Date of Issuance: February 26, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 98 FACILITY OPERATING LICENSE NO. DPR-68 DOCKET NO. 50-296

Revise Appendix A as follows:

1. Remove the following pages and replace with identically numbered pages.

368

2. The marginal lines on these pages denote the area being changed.

6.0 ADMINISTRATIVE CONTROLS

6.3 Procedures

- A. Detailed written procedures, including applicable checkoff lists covering items listed below shall be prepared, approved and adhered to.
 - 1. Normal startup, operation and shutdown of the reactor and of all systems and components involving nuclear safety of the facility.
 - 2. Refueling operations.
 - 3. Actions to be taken to correct specific and foreseen potential malfunctions of systems or components, including responses to alarms, suspected primary system leaks and abnormal reactivity changes.
 - 4. Emergency conditions involving potential or actual release of radioactivity.
 - 5. Preventive or corrective maintenance operations which could have an effect on the safety of the reactor.
 - 6. Surveillance and testing requirements.
 - 7. Radiation control procedures.
 - 8. Radiological Emergency Plan implementing procedures.
 - 9. Plant security program implementing procedures.
 - 10. Fire protection and prevention procedures.
 - 11. Limitations on the amount of overtime worked by individuals performing safety-related functions in accordance with the NRC policy statement on working hours (Generic Letter No. 82-12).
- B. Written procedures pertaining to those items listed above shall be reviewed by PORC and approved by the plant superintendent prior to implementation. Temporary changes to a procedures which do not change the intent of the approved procedure may be made by a member of the plant staff knowledgeable in the area affected by the procedure except that temporary changes to those items listed above except item 5 require the additional approval of a member of the plant staff who holds a Senior Reactor Operator license on the unit affected. Such changes shall be documented and subsequently reviewed by PORC and approved by the plant superintendent.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

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

AMENDMENT NO. 122 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 98 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

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

1.0 INTRODUCTION

By letter dated November 5, 1985 (TVA BFNP TS-214), the Tennessee Valley Authority (the licensee or TVA) requested amendments to Facility Operating License Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3. The proposed amendments would change the Technical Specifications to add a requirement that detailed written plant procedures be prepared, approved, and adhered to, limiting the amount of overtime worked by individuals performing safety-related functions. The November 5, 1985 submittal made minor changes in the wording of an earlier December 21, 1984 (TS-206) submittal to clarify that the procedures will be in accordance with the Commission's policy on overtime but did not depart from the proposed amendment as described in the notice published on February 27, 1985 (50 FR 8009).

2.0 EVALUATION

IE Circular No. 80-02, "Nuclear Power Plant Staff Work Hours," dated February 1, 1980 provided guidance concerning overtime work by plant staff who perform safety-related functions. The guidance contained in the Circular was amended by a letter dated July 31, 1980. In turn, the guidance of the July 31, 1980 letter was revised by Item I.A.1.3 of NUREG-0737. The Commission issued a policy statement on Nuclear Power Plant Staff Working Hours through Generic Letter No. 82-12 (June 15, 1982) which further revised the overtime guidance. This guidance is as follows:

Enough plant operating personnel should be employed to maintain adequate shift coverage without routine heavy use of overtime. The objective is to have operating personnel work a normal 8-hour day, 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines are provided:

 An individual should not be permitted to work more than 16 hours straight (excluding shift turnover time).

- b. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 72 hours in any 7 day period (all excluding shift turnover time).
- c. A break of at least 8 hours should be allowed between work periods (including shift turnover time).
- d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on shift.

Recognizing that very unusual circumstances may arise requiring deviation from the above guidelines, such deviation shall be authorized by the plant manager or his deputy, or higher level of management. The paramount consideration in such authorizations shall be that significant reductions in the effectiveness of operating personnel would be highly unlikely. Authorized deviations to the working hour guidelines shall be documented and available for NRC review. In addition, procedures are encouraged that would allow licensed operators at the controls to be periodically relieved to perform other duties away from the control board during their shift.

Generic Letters No. 82-12 and 83-02 requested licensees to initiate action to revise technical specifications to assure that plant procedures are consistent with the above policy. Generic Letter 83-14 clarified the guidance of Generic Letter 82-12 to define the term "key maintenance personnel." The licensee's proposed amendment would require plant procedures in accordance with the NRC policy statement on working hours as provided in Generic Letter No. 82-12. We find this acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

This amendment relates to changes in administrative procedures or requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, 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, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10) and pursuant to 10 CFR 51.22(b) no environmental impact statement or assessment need to prepared in connection with the issuance of this amendment.

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

Principal Contributor: W. Long

Dated: February 26, 1986