

May 30, 1984

Docket Nos. 50-259/260/296

Mr. Hugh G. Parris  
Manager of Power  
Tennessee Valley Authority  
500A Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Dear Mr. Parris:

The Commission has issued the enclosed Amendment Nos. 99, 93 and 66 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 applications dated March 22, 1984 (TVA BFNP TS 194 Supplement 1) and June 20, 1983 (TVA BFNP TS 176-S7). The March 22, 1984 application superseded an earlier application dated November 28, 1983.

These amendments change Section 6.0 of the Technical Specifications to modify the reporting requirements to incorporate the new 10 CFR 50.73 and TMI Item II.K.3.3.

A copy of the Safety Evaluation is also enclosed.

Sincerely,

Original signed by/

Richard J. Clark, Project Manager  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

1. Amendment No. 99 to License No. DPR-33
2. Amendment No. 93 to License No. DPR-52
3. Amendment No. 66 to License No. DPR-68
4. Safety Evaluation

cc w/enclosures:  
See next page

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ORB#2 Reading  
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TBarnhart (12)  
WJones  
DBrinkman  
ACRS (10)  
OPA, CMiles

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Gray File  
Extra - 5

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DVassallo  
05/14/84

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JANSON  
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DL:AD-OR  
GLainas  
05/17/84

*[Handwritten signatures and scribbles]*

Mr. Hugh G. Parris  
Tennessee Valley Authority  
Browns Ferry Nuclear Plant, Units 1, 2 and 3

cc:

H. S. Sanger, Jr., Esquire  
General Counsel  
Tennessee Valley Authority  
400 Commerce Avenue  
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Knoxville, Tennessee 37902

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Region IV Office  
Regional Radiation Representative  
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Tennessee Valley Authority  
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Chattanooga, Tennessee 37401

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U. S. Nuclear Regulatory Commission  
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Chairman, Limestone County Commission  
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Tennessee Valley Authority  
Knoxville, Tennessee 37902

Mr. Oliver Havens  
U. S. Nuclear Regulatory Commission  
Reactor Training Center  
Osborne Office Center, Suite 200  
Chattanooga, Tennessee 37411

James P. O'Reilly  
Regional Administrator  
Region II Office  
U. S. Nuclear Regulatory Commission  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1

AMÉNDMENT TO FACILITY OPERATING LICENSE

Amendment No. 99  
License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Tennessee Valley Authority (the licensee) dated March 22, 1984 and June 20, 1983, comply 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:

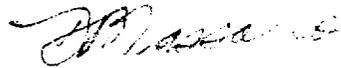
(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 99, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief  
Operating-Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 30, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 99

FACILITY OPERATING LICENSE NO. DPR-33

DOCKET NO. 50-259

Revise Appendix A as follows:

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

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

1.0 DEFINITIONS (Cont'd)

10. Logic - A logic is an arrangement of relays, contacts, and other components that produces a decision output.
- (a) Initiating - A logic that receive signals from channels and produces decision outputs to the actuation logic.
- (b) Actuation - A logic that receives signals (either from initiation logic or channels) and produces decision outputs to accomplish a protective action.
- W. Functional Tests - A functional test is the manual operation or initiation of a system, subsystem, or components to verify that it functions within design tolerances (e.g., the manual start of a core spray pump to verify that it runs and that it pumps the required volume of water).
- X. Shutdown - The reactor is in a shutdown condition when the reactor mode switch is in the shutdown mode position and no core alterations are being performed.
- Y. Engineered Safeguard - An engineered safeguard is a safety system the actions of which are essential to a safety action required in response to accidents.
- Z. Reportable Event - A reportable event shall be any of those conditions specified in section 50.73 to 10 CFR Part 50.

6.0 ADMINISTRATIVE CONTROLS

- g. All reportable events.
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- i. Reports and meeting minutes of the PORC.

8. AUDITS

Audits of unit activities shall be performed under the cognizance of the NSRB. These audits shall encompass.

- a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire unit staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in unit equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Site Radiological Emergency Plan and implementing procedures at least once per 24 months.
- f. The Plant Physical Security Plan and implementing procedures at least once per 24 months.
- g. Any other area of unit operation considered appropriate by the NSRB or the Manager of Power.
- h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 3 years.

## 6.0 ADMINISTRATIVE CONTROLS

### 4. Duties and Responsibilities

The KIRC serves in an advisory capacity to the plant superintendent and as an investigating and reporting body to the Nuclear Safety Review Board in matters related to safety in plant operations. The plant superintendent has the final responsibility in determining the matters that should be referred to the Nuclear Safety Review Board.

The responsibility of the committee will include:

- a. Review all standard and emergency operating and maintenance instructions and any proposed revisions thereto, with principal attention to provisions for safe operation.
- b. Review proposed changes to the Technical Specifications.
- c. Review proposed changes to equipment or systems having safety significance, or which may constitute "an unreviewed safety question," pursuant to 10 CFR 50.59.
- d. Investigate reported or suspected incidents involving safety questions, violations of the Technical Specifications, and violations of plant instructions pertinent to nuclear safety.
- e. Review reportable events, unusual events, operating anomalies and abnormal performance of plant equipment.
- f. Maintain a general surveillance of plant activities to identify possible safety hazards.
- g. Review plans for special fuel handling, plant maintenance, operations, and tests or experiments which may involve special safety considerations, and the results thereof, where applicable.
- h. Review adequacy of quality assurance program and recommend any appropriate changes.
- i. Review implementing procedures of the Radiological Emergency Plan and the Industrial Security Program on an annual basis.

6.0 ADMINISTRATIVE CONTROLS

6.4 Actions to be Taken in the Event of a Reportable Event in Plant Operation (Ref. Section 6.7)

- A. Any reportable event shall be promptly reported to the Manager, Nuclear Production and shall be promptly reviewed by PORC. This committee shall prepare a separate report for each reportable event. This report shall include an evaluation of the cause of the event and recommendations for appropriate action to prevent or reduce the probability of a repetition of the event.
- B. Copies of all such reports shall be submitted to the Manager Nuclear Production and the Chairman of the NSRB for their review.
- C. The plant superintendent shall notify the NRC as specified in Section 50.73 to 10 CFR Part 50 of the circumstances of any reportable event.

6.5 Action to be Taken in the Event a Safety Limit is Exceeded

If a safety limit is exceeded, the reactor shall be shut down and reactor operation shall not be resumed until authorized by the NRC. A prompt report shall be made to the Manager, Nuclear Production, and the Chairman of the NSRB. A complete analysis of the circumstances leading up to and resulting from the situation, together with recommendations to prevent a recurrence, shall be prepared by the PORC. This report shall be submitted to the Manager, Nuclear Production and the NSRB. Notification of such occurrences will be made to the NRC by the plant superintendent within 24 hours.

6.6 Station Operating Records

- A. Records and/or logs shall be kept in a manner convenient for review as indicated below:
  1. All normal plant operation including such items as power level, fuel exposure, and shutdowns.
  2. Principal maintenance activities.
  3. Reportable Events

## 6.0 ADMINISTRATIVE CONTROLS

### (b). Annual Operating Report

A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions. Any mainsteam safety/relief valve that opens in response to reaching its setpoint or due to operator action to control reactor pressure shall be reported.

- c. Monthly Operating Report. Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555, with a copy to the appropriate Regional Office, to be submitted no later than the tenth of each month following the calendar month covered by the report. A narrative summary of operating experience shall be submitted in the above schedule.

### 2. Reportable Events

Reportable events, including corrective actions and measures to prevent reoccurrence, shall be reported to the NRC in accordance with Section 50.73 to 10 CFR 50.

6.0 ADMINISTRATIVE CONTROLS

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3. Unique Reporting Requirements

A. Radioactive Effluent Release Report

A report on the radioactive discharges released from the site during the previous 6 months of operation shall be submitted to the Director of the Regional Office of Inspection and Enforcement within 60 days after January 1 and July 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents released and solid waste shipped from the plant as delineated in Regulatory Guide 1.21, Revision 1, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," with data summarized on a quarterly basis following the format of Appendix B thereof.

The report shall include a summary of the meteorological conditions concurrent with the release of gaseous effluents during each quarter as outlined in Regulatory Guide 1.21, Revision 1, with data summarized on a quarterly basis following the format of Appendix B thereof. Calculated offsite dose to humans resulting from the release of effluents and their subsequent dispersion in the atmosphere shall be reported as recommended in Regulatory Guide 1.21, Revision 1.



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. 93  
License No. DPR-52

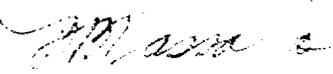
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Tennessee Valley Authority (the licensee) dated March 22, 1984, and June 20, 1983, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the 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. 93, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Domenic B. Vassallo, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 30, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 93

FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Revise Appendix A as follows:

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

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

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- W. Functional Tests - A functional test is the manual operation or initiation of a system, subsystem, or components to verify that it functions within design tolerances (e.g., the manual start of a core spray pump to verify that it runs and that it pumps the required volume of water).
- X. Shutdown - The reactor is in a shutdown condition when the reactor mode switch is in the shutdown mode position and no core alterations are being performed.
- Y. Engineered Safeguard - An engineered safeguard is a safety system the actions of which are essential to a safety action required in response to accidents.
- Z. Reportable Event - A reportable event shall be any of those conditions specified in section 50.73 to 10 CFR Part 50.

6.0 ADMINISTRATIVE CONTROLS

- g. All reportable events.
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- i. Reports and meeting minutes of the PORC.

8. AUDITS

Audits of unit activities shall be performed under the cognizance of the NSRB. These audits shall encompass.

- a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire unit staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in unit equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Site Radiological Emergency Plan and implementing procedures at least once per 24 months.
- f. The Plant Physical Security Plan and implementing procedures at least once per 24 months.
- g. Any other area of unit operation considered appropriate by the NSRB or the Manager of Power.
- h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 3 years.

## 6.0 ADMINISTRATIVE CONTROLS

### 4. Duties and Responsibilities

The PIRC serves in an advisory capacity to the plant superintendent and as an investigating and reporting body to the Nuclear Safety Review Board in matters related to safety in plant operations. The plant superintendent has the final responsibility in determining the matters that should be referred to the Nuclear Safety Review Board.

The responsibility of the committee will include:

- a. Review all standard and emergency operating and maintenance instructions and any proposed revisions thereto, with principal attention to provisions for safe operation.
- b. Review proposed changes to the Technical Specifications.
- c. Review proposed changes to equipment or systems having safety significance, or which may constitute "an unreviewed safety question," pursuant to 10 CFR 50.59.
- d. Investigate reported or suspected incidents involving safety questions, violations of the Technical Specifications, and violations of plant instructions pertinent to nuclear safety.
- e. Review reportable events, unusual events, operating anomalies and abnormal performance of plant equipment.
- f. Maintain a general surveillance of plant activities to identify possible safety hazards.
- g. Review plans for special fuel handling, plant maintenance, operations, and tests or experiments which may involve special safety considerations, and the results thereof, where applicable.
- h. Review adequacy of quality assurance program and recommend any appropriate changes.
- i. Review implementing procedures of the Radiological Emergency Plan and the Industrial Security Program on an annual basis.

6.0 ADMINISTRATIVE CONTROLS

6.4 Actions to be Taken in the Event of a Reportable Event in Plant Operation (Ref. Section 6.7)

- A. Any reportable event shall be promptly reported to the Manager, Nuclear Production and shall be promptly reviewed by PORC. This committee shall prepare a separate report for each reportable event. This report shall include an evaluation of the cause of the event and recommendations for appropriate action to prevent or reduce the probability of a repetition of the event.
- B. Copies of all such reports shall be submitted to the Manager Nuclear Production and the Chairman of the NSRB for their review.
- C. The plant superintendent shall notify the NRC as specified in Section 50.73 to 10 CFR Part 50 of the circumstances of any reportable event.

6.5 Action to be Taken in the Event a Safety Limit is Exceeded

If a safety limit is exceeded, the reactor shall be shut down and reactor operation shall not be resumed until authorized by the NRC. A prompt report shall be made to the Manager, Nuclear Production, and the Chairman of the NSRB. A complete analysis of the circumstances leading up to and resulting from the situation, together with recommendations to prevent a recurrence, shall be prepared by the PORC. This report shall be submitted to the Manager, Nuclear Production and the NSRB. Notification of such occurrences will be made to the NRC by the plant superintendent within 24 hours.

6.6 Station Operating Records

- A. Records and/or logs shall be kept in a manner convenient for review as indicated below:
  - 1. All normal plant operation including such items as power level, fuel exposure, and shutdowns.
  - 2. Principal maintenance activities.
  - 3. Reportable Events

## 6.0 ADMINISTRATIVE CONTROLS

### (b). Annual Operating Report

A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions. Any mainsteam safety/relief valve that opens in response to reaching its setpoint or due to operator action to control reactor pressure shall be reported.

- c. Monthly Operating Report. Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555, with a copy to the appropriate Regional Office, to be submitted no later than the tenth of each month following the calendar month covered by the report. A narrative summary of operating experience shall be submitted in the above schedule.

### 2. Reportable Events

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The report shall include a summary of the meteorological conditions concurrent with the release of gaseous effluents during each quarter as outlined in Regulatory Guide 1.21, Revision 1, with data summarized on a quarterly basis following the format of Appendix B thereof. Calculated offsite dose to humans resulting from the release of effluents and their subsequent dispersion in the atmosphere shall be reported as recommended in Regulatory Guide 1.21, Revision 1.



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMÉNDMENT TO FACILITY OPERATING LICENSE

Amendment No. 66  
License No. DPR-68

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Tennessee Valley Authority (the licensee) dated March 22, 1984 and June 20, 1983, comply 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. 66, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Domenic B. Vassallo, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 30, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 66

FACILITY OPERATING LICENSE NO. DPR-68

DOCKET NO. 50-296

Revise Appendix A as follows:

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

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

a protective trip function. A trip system may require one or more instrument channel trip signals related to one or more plant parameters in order to initiate trip system action. Initiation of protective action may require the tripping of a single trip system or the coincident tripping of two trip systems.

7. Protective Action - An action initiated by the protection system when a limit is reached. A protective action can be at a channel or system level.
8. Protective Function - A system protective action which results from the protective action of the channels monitoring a particular plant condition.
9. Simulated Automatic Actuation - Simulated automatic actuation means applying a simulated signal to the sensor to actuate the circuit in question.
10. Logic - A logic is an arrangement of relays, contacts, and other components that produces a decision output.
  - (a) Initiating - A logic that receives signals from channels and produces decision outputs to the actuation logic.
  - (b) Actuation - A logic that receives signals (either from initiation logic or channels) and produces decision outputs to accomplish a protective action.
- W. Functional Tests - A functional test is the manual operation or initiation of a system, subsystem, or component to verify that it functions within design tolerances ( e.g., the manual start of a core spray pump to verify that it runs and that it pumps the required volume of water).
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6.0 ADMINISTRATIVE CONTROLS

- g. All reportable events.
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
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- g. Any other area of unit operation considered appropriate by the NSRB or the Manager of Power.
- h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 3 years.

## 6.0 ADMINISTRATIVE CONTROLS

### 4. Duties and Responsibilities

The ROKC serves in an advisory capacity to the plant superintendent and as an investigating and reporting body to the Nuclear Safety Review Board in matters related to safety in plant operations. The plant superintendent has the final responsibility in determining the matters that should be referred to the Nuclear Safety Review Board.

The responsibility of the committee will include:

- a. Review all standard and emergency operating and maintenance instructions and any proposed revisions thereto, with principal attention to provisions for safe operation.
- b. Review proposed changes to the Technical Specifications.
- c. Review proposed changes to equipment or systems having safety significance, or which may constitute "an unreviewed safety question," pursuant to 10 CFR 50.59.
- d. Investigate reported or suspected incidents involving safety questions, violations of the Technical Specifications, and violations of plant instructions pertinent to nuclear safety.
- e. Review reportable events, unusual events, operating anomalies, and abnormal performance of plant equipment.
- f. Maintain a general surveillance of plant activities to identify possible safety hazards.
- g. Review plans for special fuel handling, plant maintenance, operations, and tests or experiments which may involve special safety considerations, and the results thereof, where applicable.
- h. Review adequacy of quality assurance program and recommend any appropriate changes.
- i. Review implementing procedures of the Radiological Emergency Plan and the Industrial Security Program on an annual basis.

6.0 ADMINISTRATIVE CONTROLS

6.4 Actions to be Taken in the Event of a Reportable Event in Plant Operation (Ref. Section 6.7)

- A. Any reportable event shall be promptly reported to the Manager, Nuclear Production and shall be promptly reviewed by PORC. This committee shall prepare a separate report for each reportable event. This report shall include an evaluation of the cause of the event and recommendations for appropriate action to prevent or reduce the probability of a repetition of the event.
- B. Copies of all such reports shall be submitted to the Manager Nuclear Production and the Chairman of the NSRB for their review.
- C. The plant superintendent shall notify the NRC as specified in Section 50.73 to 10 CFR Part 50 of the circumstances of any reportable event.

6.5 Action to be Taken in the Event a Safety Limit is Exceeded

If a safety limit is exceeded, the reactor shall be shut down and reactor operation shall not be resumed until authorized by the NRC. A prompt report shall be made to the Manager, Nuclear Production, and the Chairman of the NSRB. A complete analysis of the circumstances leading up to and resulting from the situation, together with recommendations to prevent a recurrence, shall be prepared by the PORC. This report shall be submitted to the Manager, Nuclear Production and the NSRB. Notification of such occurrences will be made to the NRC by the plant superintendent within 24 hours.

6.6 Station Operating Records

- A. Records and/or logs shall be kept in a manner convenient for review as indicated below:
  - 1. All normal plant operation including such items as power level, fuel exposure, and shutdowns.
  - 2. Principal maintenance activities.
  - 3. Reportable Events

## 6.0 ADMINISTRATIVE CONTROLS

### b. Annual Operating Report

A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions. Any mainsteam safety/relief valve that opens in response to reaching its setpoint or due to operator action to control reactor pressure shall be reported.

- c. Monthly Operating Report. Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the appropriate Regional Office, to be submitted no later than the tenth of each month following the calendar month covered by the report. A narrative summary of operating experience shall be submitted in the above schedule.

### 2. Reportable Events

Reportable events, including corrective actions and measures to prevent reoccurrence, shall be reported to the NRC in accordance with Section 50.73 to 10 CFR 50.

6.0 ADMINISTRATIVE CONTROLS

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3. Unique Reporting Requirements

A. Radioactive Effluent Release Report

A report on the radioactive discharges released from the site during the previous 6 months of operation shall be submitted to the Director of the Regional Office of Inspection and Enforcement within 60 days after January 1 and July 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents released and solid waste shipped from the plant as delineated in Regulatory Guide 1.21, Revision 1, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," with data summarized on a quarterly basis following the format of Appendix B thereof.

The report shall include a summary of the meteorological conditions concurrent with the release of gaseous effluents during each quarter as outlined in Regulatory Guide 1.21, Revision 1, with data summarized on a quarterly basis following the format of Appendix B thereof. Calculated offsite dose to humans resulting from the release of effluents and their subsequent dispersion in the atmosphere shall be reported as recommended in Regulatory Guide 1.21, Revision 1.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 99 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 93 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNIT NOS. 1, 2 AND 3

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

1.0 Introduction

By letters dated June 20, 1983, November 28, 1983 and March 22, 1984 the Tennessee Valley Authority (the licensee or TVA) requested changes to the Technical Specifications (Appendix A) 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 require safety/relief valve challenges to be reported in the Annual Operating Report and would modify other reporting requirements to comply with revised 10 CFR 50.72 and 10 CFR 50.73.

2.0 Evaluation

The staff issued its notice of the proposed license amendment to incorporate 10 CFR 50.73 into the Technical Specifications on February 24, 1984 and its notice to incorporate TMI Item II.K.3.3, safety and relief valve challenges and failures reporting requirements on November 22, 1983. The notice issued February 24, 1984 was based on information provided in the licensee's November 28, 1983 letter which was superseded by the March 22, 1984 letter. The November 28, 1983 letter proposed a rewrite of the Technical Specifications to incorporate 10 CFR 50.73 whereas the March 22, 1984 letter proposed to incorporate 10 CFR 50.73 by direct reference. Since the effects are identical, the staff decided the March 22, 1984 letter is within the scope of the February 24, 1984 notice.

On January 10, 1983 the NRC issued Generic Letter (GL) 83-02 which provided guidance for changing Technical Specifications to incorporate TMI Item II.K.3.3 requirements to report safety and relief valve challenges annually (or monthly) and to report safety and relief valve failures promptly. TVA's letter of June 20, 1983 requested the amendments in compliance with GL 83-02.

On December 19, 1983 the NRC issued Generic Letter 83-43 which provided guidance for changing Technical Specifications to incorporate the revised 10 CFR 50.72 and new 10 CFR 50.73 which revise the immediate notification

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requirements and provide a revised Licensee Event Report System. TVA's letter of March 22, 1984 requested the amendments in accordance with GL 83-43. This letter superseded the November 28, 1983 letter written prior to issuance of GL 83-43.

The requested changes are consistent with the requirements of 10 CFR 50.72 and 50.73 and, NUREG-0737, Item II.K.3.3 and are therefore, acceptable.

### 3.0 Environmental Considerations

We have determined that these amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that these amendments involve an action which is insignificant from the standpoint of environmental impact, and pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

### 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: May 30, 1984