



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

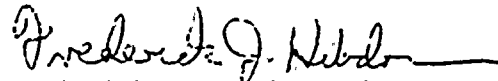
Amendment No. 202
License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated September 30, 1993 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.

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2. Accordingly, the license is hereby amended by deletion of Paragraph 2.C.(8) of Facility Operating License No. DPR-33.
3. This amendment shall be effective as of its date of issuance and implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

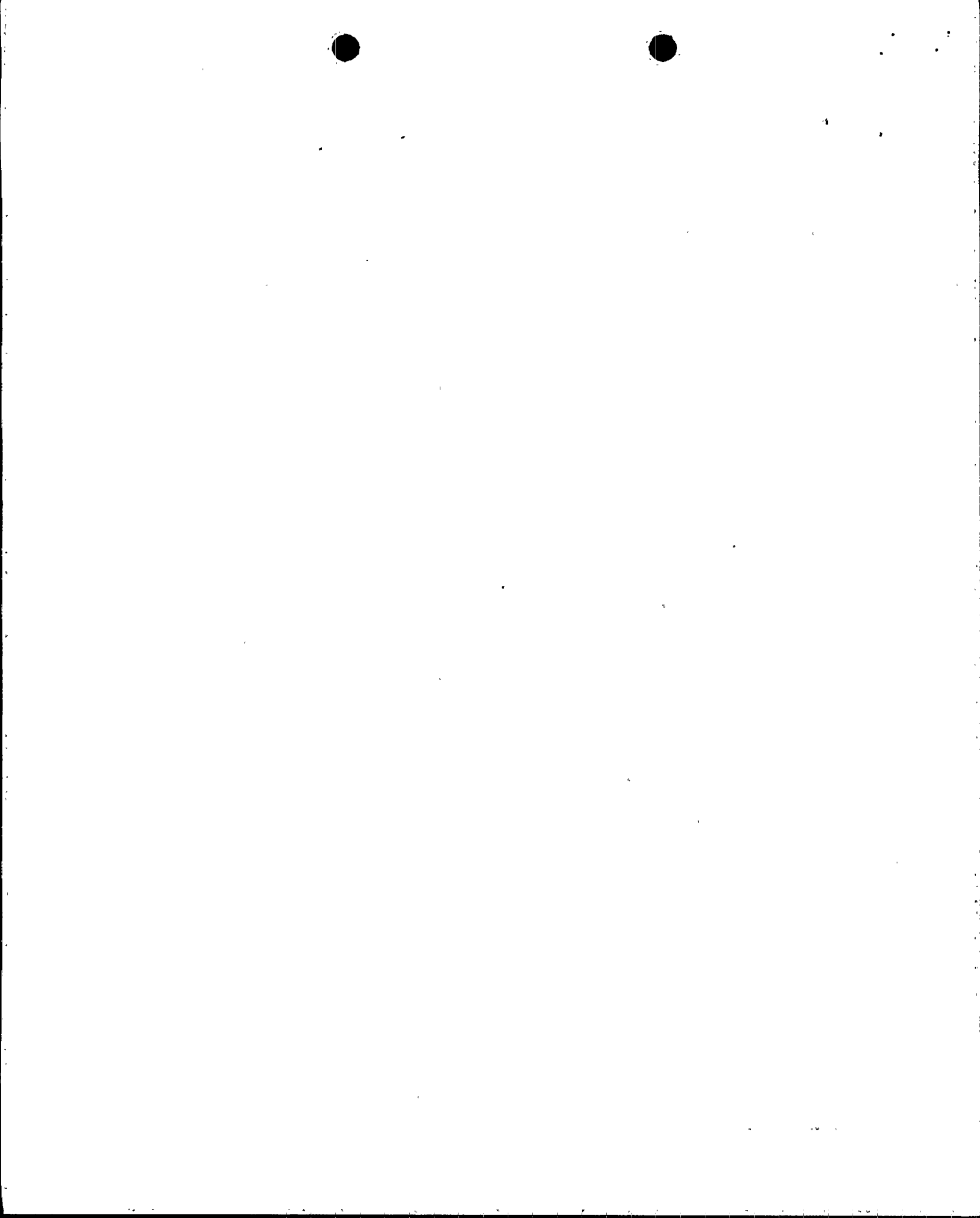


Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Pages 3 and 4 of License*

Date of Issuance: February 1, 1994

* Page 4 is attached for convenience, for the composite license to reflect this change. Overleaf page is included.



APR 01, 1993

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or equipment and instrument calibration or associated with radioactive apparatus or components;
 - (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 3293 megawatts thermal.
 - (2) Technical Specifications
The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 201, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.
 - (3) In the operation of the facility, the licensee shall, pursuant to the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), comply with all applicable thermal water quality standards of the State of Alabama and the United States.
 - (4) Deleted.
 - (5) The facility may be modified by plugging the bypass flow holes in the lower core support plate as described in Browns Ferry Nuclear Plant Units 1 and 2 Safety Analysis Report for Plant Modifications to Eliminate Significant In-Core Vibrations (NEDC-21091), October 1975. The reactor shall not be operated with the plugs installed in the lower core support plate bypass flow holes without further authorization by the NRC.

- (6) The facility may be modified by drilling bypass flow holes in Type 2 and Type 3 fuel assemblies as described in NEDO-21091, "Browns Ferry Nuclear Plant, Units 1 & 2 Safety Analysis Report for Plant Modifications to Eliminate Significant In-Core Vibrations;" and NEDE-21156, "Supplemental Information for Plant Modification to Eliminate Significant In-Core Vibrations," dated January 1976.
- (7) The facility may be modified as described in "Browns Ferry Nuclear Plant Units 1 and 2 Emergency Core Cooling Systems Low Pressure Coolant Injection Modifications for Performance Improvement (December 1975)" submitted by application dated December 1, 1975 and supplements dated February 12, 1976, March 24, 1976, March 30, 1976, May 21, 1976, June 11, 1976, and July 21, 1976.
- (8) The licensee shall maintain in effect and fully implement all provisions of the Commission approved physical security plan including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plan, which contains information protected under 10 CFR 73.21, is entitled "Browns Ferry Nuclear Plant Physical Security Plan," dated May 15, 1982 (TVA letter dated June 11, 1982) and revisions submitted by TVA letters dated August 31, 1982 and October 19, 1982.
- (9) The facility may be modified as described in "Browns Ferry Nuclear Plant Units 1 and 2 Emergency Core Cooling Systems Low Pressure Coolant Injection Modifications For Performance Improvement (October 1977)" submitted by letter dated December 28, 1977 and supplemented by letter dated December 13, 1978.
- (10) The licensee shall follow all provisions of the NRC approved Guard Training & Qualification Plan, including amendments and changes made pursuant to 10 CFR 50.54(p). The approved Guard Training & Qualification Plan is identified as "Browns Ferry Nuclear Power Station Guard Training & Qualification Plan," dated August 17, 1979, as revised by pages dated January 24, 1980, May 21, 1980, October 1, 1980, and March 9, 1981 and as may subsequently be revised in accordance with 10 CFR 50.54(p). The Guard Training & Qualification Plan shall be followed, in accordance with 10 CFR 73.55(b), 60 days after the date of this amendment.





UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

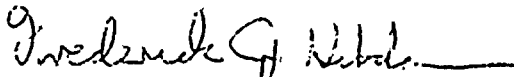
Amendment No. 221
License No. DPR-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated September 30, 1993 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 hereby amended by deletion of Paragraph 2.C.(8) of Facility Operating License No. DPR-52.
3. This amendment shall be effective as of its date of issuance and implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


Frederick J. Hebbon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Pages 5 and 6 of License*

Date of Issuance: February 1, 1994

* Page 5 is attached for convenience, for the composite license to reflect this change. Overleaf page is included.



- (8) The licensee shall maintain in effect and fully implement all provisions of the Commission approved physical security plan including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plan, which contains information protected under 10 CFR 73.21, is entitled "Browns Ferry Nuclear Plant Physical Security Plan," dated May 15, 1982 (TVA letter dated June 11, 1982) and revisions submitted by TVA letters dated August 31, 1982 and October 19, 1982.
- (9) The facility may be modified as described in "Browns Ferry Nuclear Plant Units 1 and 2 Emergency Core Cooling Systems Low Pressure Coolant Injection Modifications For Performance Improvement (October 1977)" submitted by letter dated December 28, 1977 and supplemented by letter dated December 13, 1978.
- (10) The licensee shall follow all provisions of the NRC approved Guard Training & Qualification Plan, including amendments and changes made pursuant to 10 CFR 50.54(p). The approved Guard Training & Qualification Plan is identified as "Browns Ferry Nuclear Power Station Guard Training & Qualification Plan," dated August 17, 1979, as revised by pages dated January 24, 1980, May 21, 1980, October 1, 1980, and March 9, 1981 and as may subsequently be revised in accordance with 10 CFR 50.54(p). The Guard Training & Qualification Plan shall be followed, in accordance with 10 CFR 73.55(b), 60 days after the date of this amendment.
- (11) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Browns Ferry Physical Security Plan", with revisions submitted through May 24, 1988; "Browns Ferry Security Personnel Training and Qualification Plan", with revisions submitted through April 16, 1987; and "Browns Ferry Safeguards Contingency Plan", with revisions submitted through June 27, 1986. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

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- (12) The licensee is authorized to temporarily store low-level radioactive waste in an existing covered pavilion that is situated outside the security fence, as presently located, but inside the site exclusion area. The total amount of low-level waste to be stored shall not exceed 1320 curies of total activity. This authorization expires two years from the effective date of this amendment and is subject to all the conditions and restrictions in TVA's application dated January 21, 1980.
- (13) Commission Order dated March 25, 1983 is modified as follows: in Attachment 1, for item II.F.1.1 and II.F.1.2 change "12/31/84" to "Prior to startup in Cycle 6."
- (14) Browns Ferry Nuclear Plant shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Final Safety Analysis Report for BFN as approved in the SEs dated December 8, 1988, March 6, 1991, March 31, 1993 and Supplement dated November 3, 1989 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- D. This amended license is effective as of the date of issuance and shall expire midnight on June 28, 2014.

FOR THE ATOMIC ENERGY COMMISSION

S/ A. Giambusso
A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachment:
Appendices A & B - Technical
Specifications

Date of Issuance: JUN 28, 1974

BFN
Unit 2

AMENDMENT NO. 207





UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

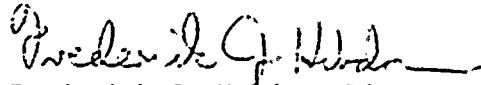
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175
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 September 30, 1993 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 hereby amended by deletion of Paragraphs 2.C.(4) and 2.C.(8), and by changing existing Paragraph Number 2.C.(9) to 2.C.(8), of Facility Operating License No. DPR-68.
3. This amendment shall be effective as of its date of issuance and implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Pages 3, 4, 5 and 6 of License*

Date of Issuance: February 1, 1994

* Pages 4 and 5 are attached for convenience, for the composite license to reflect this change. Overleaf pages are included.

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- (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 3293 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 174, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

- (3) In the operation of the facility, the licensee shall, pursuant to the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), comply with all applicable thermal water quality standards of the State of Alabama and the United States.

- (4) The licensee shall maintain in effect and fully implement all provisions of the Commission approved physical security plan including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plan, which contains information protected under 10 CFR 73.21, is entitled "Browns Ferry Nuclear Plant Physical Security Plan," dated May 15, 1982 (TVA letter dated June 11, 1982) and revisions submitted by TVA letters dated August 31, 1982 and October 19, 1982.
- (5) The licensee shall follow all provisions of the NRC approved Guard Training & Qualification Plan, including amendments and changes made pursuant to 10 CFR 50.54(p). The approved Guard Training & Qualification Plan is identified as "Browns Ferry Nuclear Power Station Guard Training & Qualification Plan," dated August 17, 1979, as revised by pages dated January 24, 1980, May 21, 1980, October 1, 1980, and March 9, 1981 and as may subsequently be revised in accordance with 10 CFR 50.54(p). The Guard Training & Qualification Plan shall be followed, in accordance with 10 CFR 73.55(b), 60 days after the date of this amendment.
- (6) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Browns Ferry Physical Security Plan", with revisions submitted through May 24, 1988; "Browns Ferry Security Personnel Training and Qualification Plan", with revisions submitted through April 16, 1987; and "Browns Ferry Safeguards Contingency Plan", with revisions submitted through June 27, 1986. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.
- (7) Browns Ferry Nuclear Plant shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Final Safety Analysis Report for BFN as approved in the SEs dated December 8, 1988, March 6, 1991, March 31, 1993 and Supplement dated November 3, 1989 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (8) The licensee is authorized to temporarily store low-level radioactive waste in an existing covered pavilion that is situated outside the security fence, as presently located, but inside the site exclusion area. The total amount of low-level waste to be stored shall not exceed 1320 curies of total activity. This authorization expires two years from the effective date of this amendment and is subject to all the conditions and restrictions in TVA's application dated January 21, 1980.

D. This license is subject to the following additional conditions:

(1) The licensee is required to assure that:

- (a) The plant unique analysis for torus support structures and attached piping for the facility meets the approved Mark I Owners Group short-term acceptance criteria when subjected to dynamic loads associated with a postulated loss-of-coolant accident. Should the licensee determine that the results of the plant unique analysis are not in conformance with the approved Mark I Owners Group short-term acceptance criteria, a specific action plan will be developed by the licensee for the facility and presented to the Commission.

This action plan will include as a minimum the following information:

- (1) The value of the load factor for which the criteria are satisfied.
 - (2) A description of proposed plant modifications or other action which will result in reduced loads or increased capacities that would satisfy the criteria.
 - (3) If a plant hardware modification is made, the acceptance criteria will be described on a plant unique basis.
- (b) Upon completion of the Mark I Owners Group long-term program related to dynamic loads associated with a postulated loss-of-coolant accident, areas of design found not meeting the original design safety margins approved for the construction permit will be modified on a timely schedule to restore the original design safety margins.

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- (2) The licensee is required, upon completion of the Mark I Owners Group containment long-term program related to relief valve operation, to make such modifications on a timely basis as may be necessary to restore the original design safety margins approved for the construction permit and used for the design of the torus structures when subjected to relief valve operation.
- (3) The facility may be modified as described in "Browns Ferry Nuclear Plant Unit 3 Emergency Core Cooling Systems Low Pressure Coolant Injection Modifications for Performance Improvement (October 1977)" and as described in TVA's letter of December 28, 1977 transmitting the aforementioned report and in TVA's supplemental letter of December 13, 1978.
- (4) Commission Order dated March 25, 1983 is modified as follows:

In Attachment 1, for item II.F.1.1 and II.F.1.2 change "12/31/84" to "Prior to Unit 2 startup in Cycle 6."

- E. This amended license is effective as of the date of issuance and shall expire midnight on July 2, 2016.

FOR THE NUCLEAR REGULATORY COMMISSION

S/ R. C. DeYoung for
Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachment:
Appendices A & B -
Technical Specifications

Date of Issuance: JUL 2 1976

BFN
Unit 3

AMENDMENT NO. 164

