Distribution
Docket
ORB #3
NRR Reading
Local PDR
NRC PDR
HDenton
DEisenhut
RTedesco
WGammill
JMiller
BGrimes
LShao
RVollmer
TIppolito
RClark
SSheppard
OI&E (5)
BJones (12)
BScharf (10)
STS Group
ACRS (16)
OPA (CMiles)
RDiggs
NSIC
TERA

Docket Nos. 50-259
50-260
and 50-296

FEBRUARY 1 5 1980

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. 58, 53 and 31 to Facility Licenses Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units Nos. 1, 2 and 3. These amendments are in response to your letter of November 29, 1979 (TVA BFNP TS 132).

These amendments change subsection 6.2. of the Administrative Controls Section of the Technical Specifications to increase the duties and functions of TVA's Nuclear Safety Review Board and to increase the number of people on the Plant Operations Review Committee. As noted in your letter of January 4, 1980, these amendments also correct a typographical error in Amendment Nos. 26 and 28 to Facility License DPR-68 which we issued on November 9, 1979 and November 30, 1979, respectively.

Copies of the Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,
Original Signed by.
T. A. Ippolito

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:
1. Amendment No. 58 to DPR-33
2. Amendment No. 53 to DPR-52
3. Amendment No. 31 to DPR-68
4. Safety Evaluation
5. Notice

cc w/enclosures:
See page 2

8003030083

OFFICE	ORB #3	ORB #3	AD:ORP	OELD	ORB #3	
SURNAME	SSheppard	RClark:mjf	WGammill		TIppolito	
DATE	/ /80	/ /80	/ /80	/ /80	/ /80	

cc:

H. S. Sanger, Jr., Esquire
General Counsel
Tennessee Valley Authority
400 Commerce Avenue
E 11B 33C
Knoxville, Tennessee 37902

Mr. Ron Rogers
Tennessee Valley Authority
400 Chestnut Street, Tower II
Chattanooga, Tennessee 37401

Mr. Charles R. Christopher
Chairman, Limestone County Commission
P. O. Box 188
Athens, Alabama 35611

Ira L. Myers, M.D.
State Health Officer
State Department of Public Health
State Office Building
Montgomery, Alabama 36104

Mr. E. G. Beasley
Tennessee Valley Authority
400 Commerce Avenue
W 10C 131C
Knoxville, Tennessee 37902

Athens Public Library
South and Forrest
Athens, Alabama 35611

Director, Office of Urban & Federal
Affairs
108 Parkway Towers
404 James Robertson Way
Nashville, Tennessee 37219

Director, Technical Assessment Division
Office of Radiation Programs (AW-459)
US EPA
Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection
Agency
Region IV Office
ATTN: EIS COORDINATOR
345 Courtland Street
Atlanta, Georgia 30308

Mr. Robert F. Sullivan
U. S. Nuclear Regulatory Commission
P. O. Box 1863
Decatur, Alabama 35602

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 58
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 November 29, 1979, 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 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. 58, 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 13, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 58

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:

332/	333
334/	335
336/	337

2. The underlined pages are those being changed; marginal lines on these pages indicate the revised area. The overleaf pages are provided for convenience.

3. Add the following new pages:

333A
334A

6.0 ADMINISTRATIVE CONTROLS

.1 Organization

A. The plant superintendent has on-site responsibility for the safe operation of the facility and shall report to the Chief, Nuclear Generation Branch. In the absence of the plant superintendent, the assistant superintendnet will assume his responsibilities.

B. The portion of TVA management which relates to the operation of the plant is shown in Figure 6.1-1.

C. The functional organization for the operation of the station shall be as shown in Figure 6.1-2.

D. Shift manning requirements shall, as a minimum, be as described in section 6.8.

E. Qualifications of the Browns Ferry Nuclear Plant management and operating staff shall meet the minimum acceptable levels as described in ANSI - N18.1, Selection and Training of Nuclear Power Plant Personnel, dated March 8, 1971. The qualifications of the Health Physics Supervisor will meet or exceed the minimum acceptable levels as described in Regulatory Guide 1.8, Revision 1, dated Sept. 1975.

F. Retraining and replacement training of station personnel shall be in accordance with ANSI - N18.1, Selection and Training of Nuclear Power Plant Personnel, dated March 8, 1971. The minimum frequency of the retraining program shall be every two years.

G. An Industrial Security Program shall be maintained for the life of the plant.

H. Responsibilities of a post-fire overall restoration coordinator will consist of duties as described in section 6.9.

I. The Safety Engineer shall have the following qualifications:

a. Must have a sound understanding and thorough technical knowledge of safety and fire protection practices, procedures, standards, and other codes relating to electrical utility operations. Must be able to read and understand engineering drawings. Must possess an analytical ability for problem solving and data analysis. Must be able to communicate well both orally and in writing and must be able to write investigative reports and prepare written procedures. Must have the ability to secure the cooperation of management, employees and groups in the implementation of safety programs. Must be able to conduct safety presentations for supervisors and employees.

b. Should have experience in safety engineering work at this level or have 3 years experience in safety and/or fire protection engineering. It is desirable that the incumbent be a graduate of an accredited college or university with a degree in inductrial, mechanical, electrical, or safety engineering or fire protection engineering.

6.0 ADMINISTRATIVE CONTROLS

6.2 REIVEW AND AUDIT

The Manager of Power is responsible for the safe operation of all TVA power plants, including the Browns Ferry Nuclear Plant. The functional organization for Review and Audit is shown in Figure 6.2-1.

Organizational units for the review of facility operation shall be constituted and have the responsibilities and authorities listed below.

A. NUCLEAR SAFETY REVIEW BOARD (NSRB)

1. FUNCTION

The NSRB shall function to provide independent review and audit of designated activities in the areas of:

a. nuclear power plant operations

b. nuclear engineering

c. chemistry and radiochemistry

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. quality assurance practices.

2. COMPOSITION

The NSRB shall be composed of at least five members, including the Chairman. Members of the NSRB may be from the Office of Power or other TVA organizations, or external to TVA.

3. QUALIFICATIONS

The Chairman, members, and alternate members of the NSRB shall be appointed in writing by the Manager of Power and shall have an academic degree in engineering or physical science field, or the equivalent; and in addition, shall have a minimum of five years technical experience in one or more areas given in 6.2.A.1. No more than two alternates shall participate as voting members in NSRB activities at any one time.

4. CONSULTANTS

Consultants shall be utilized as determined by the NSRB Chairman to provide expert advice to the NSRB.

5. MEETING FREQUENCY

The NSRB shall meet at least once per six months.

6. QUORUM

The minimum quorum of the NSRB necessary for the performance of the NSRB review and audit functions of these technical specifications shall consist of more than half of the NSRB membership or at least five members, whichever is greater. The quorum shall inlcude the Chairman or his appointed alternate and the NSRB members including appointed alternate members meeting the requirements of 6.2.A.3. No more than a minority of the quorum shall have line responsibility for operation of the unit.

7. REVIEW

The NSRB shall review:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

d. Proposed changes to Technical Specifications or this Operating License.

e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

g. All written reports requiring 24-hour notification to the Commission.

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.

B. Plant Operations Review Committee (PORC)

1. Membership

The PORC shall consist of the plant superintendent, assistant plant superintendent, electric maintenance supervisor, mechanical maintenance supervisor, instrument maintenance supervisor, health physics supervisor, operations supervisor, results supervisor, and QA staff supervisor. An assistant plant supervisor may serve as an alternate committee member when his supervisor is absent.

The plant superintendent will serve as chairman of the PORC. The assistant plant superintendent will serve as chairman in the absence of the plant superintendent.

2. Meeting Frequency

The PORC shall meet at regular monthly intervals and for special meetings as called by the chairman or as requested by individual members.

3. Quorum

Superintendent or assistant superintendent, plus five of the seven other members, or their alternate, will constitute a quorum. A member will be considered present if he is in telephone communication with the committee.

k. The radiological environmental monitoring program and the results thereof at least once per 12 months.

l. The performance of activities required by the Quality Assurance Program to meet the criteria of Regulatory Guide 4.15, December 1977 at least once per 12 months.

9. AUTHORITY

The NSRB shall report to and advise the Manager of Power on those areas of responsibility specified in Sections 6.2.A.7 and 6.2.A.8.

10. RECORDS

Records of NSRB activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Manager of Power within 14 days following each meeting.

b. Reports of reviews encompassed by Section 6.2.A.7 above, shall be prepared, approved and forwarded to the Manager of Power within 14 days following completion of the review.

c. Audit reports encompassed by Section 6.2.A.8 above, shall be forwarded to the Manager of Power and to the management positions responsible for the areas audited within 30 days after completion of the audit.

4. Duties and Responsibilities

The PORC 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 porposed 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 occurrences, 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 experiements 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 implementating procedures of the Radiological Emergency Plan and the Industrial Security Program on an annual basis.

j. Review adequacy of employee training programs and recommend change.

5. Authority

The PORC shall be advisory to the plant superintendent.

6. Records

Minutes shall be kept for all PORC meetings with copies sent to Director, Power Production; Chief, Nuclear Generation Branch; Chairman, NSRB.

7. Procedures

Written administrative procedures for committee operation shall be prepared and maintained describing the method for submission and content of presentations to the committee, review and approval by members of committee actions, dissemination of minutes, agenda and scheduling of meetings.

C.

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 53
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 November 29, 1979, 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 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. 53, 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 13, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 53

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:

333/334
335/336
337/338

2. The underlined pages are those being changed; marginal lines on these pages indicate the revised area. The overleaf pages are provided for convenience.

3. Add the following new pages:

333A
334A

6.0 ADMINISTRATIVE CONTROLS

6.2 REIVEW AND AUDIT

The Manager of Power is responsible for the safe operation of all TVA power plants, including the Browns Ferry Nuclear Plant. The functional organization for Review and Audit is shown in Figure 6.2-1.

Organizational units for the review of facility operation shall be constituted and have the responsibilities and authorities listed below.

A. NUCLEAR SAFETY REVIEW BOARD (NSRB)

1. FUNCTION

The NSRB shall function to provide independent review and audit of designated activities in the areas of:

a. nuclear power plant operations

b. nuclear engineering

c. chemistry and radiochemistry

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. quality assurance practices.

2. COMPOSITION

The NSRB shall be composed of at least five members, including the Chairman. Members of the NSRB may be from the Office of Power or other TVA organizations, or external to TVA.

3. QUALIFICATIONS

The Chairman, members, and alternate members of the NSRB shall be appointed in writing by the Manager of Power and shall have an academic degree in engineering or physical science field, or the equivalent; and in addition, shall have a minimum of five years technical experience in one or more areas given in 6.2.A.1. No more than two alternates shall participate as voting members in NSRB activities at any one time.

g. All written reports requiring 24-hour notification to the Commission.

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.

4. CONSULTANTS

Consultants shall be utilized as determined by the NSRB Chairman to provide expert advice to the NSRB.

5. MEETING FREQUENCY

The NSRB shall meet at least once per six months.

6. QUORUM

The minimum quorum of the NSRB necessary for the performance of the NSRB review and audit functions of these technical specifications shall consist of more than half of the NSRB membership or at least five members, whichever is greater. The quorum shall inlcude the Chairman or his appointed alternate and the NSRB members including appointed alternate members meeting the requirements of 6.2.A.3. No more than a minority of the quorum shall have line responsibility for operation of the unit.

7. REVIEW

The NSRB shall review:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

d. Proposed changes to Technical Specifications or this Operating License.

e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

k. The radiological environmental monitoring program and the results thereof at least once per 12 months.

l. The performance of activities required by the Quality Assurance Program to meet the criteria of Regulatory Guide 4.15, December 1977 at least once per 12 months.

9. AUTHORITY

The NSRB shall report to and advise the Manager of Power on those areas of responsibility specified in Sections 6.2.A.7 and 6.2.A.8.

10. RECORDS

Records of NSRB activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Manager of Power within 14 days following each meeting.

b. Reports of reviews encompassed by Section 6.2.A.7 above, shall be prepared, approved and forwarded to the Manager of Power within 14 days following completion of the review.

c. Audit reports encompassed by Section 6.2.A.8 above, shall be forwarded to the Manager of Power and to the management positions responsible for the areas audited within 30 days after completion of the audit.

B. Plant Operations Review Committee (PORC)

1. Membership

The PORC shall consist of the plant superintendent, assistant plant superintendent, electric maintenance supervisor, mechanical maintenance supervisor, instrument maintenance supervisor, health physics supervisor, operations supervisor, results supervisor, and QA staff supervisor. An assistant plant supervisor may serve as an alternate committee member when his supervisor is absent.

The plant superintendent will serve as chairman of the PORC. The assistant plant superintendent will serve as chairman in the absence of the plant superintendent.

2. Meeting Frequency

The PORC shall meet at regular monthly intervals and for special meetings as called by the chairman or as requested by individual members.

3. Quorum

Superintendent or assistant superintendent, plus five of the seven other members, or their alternate, will constitute a quorum. A member will be considered present if he is in telephone communication with the committee.

4. Duties and Responsibilities

The PORC 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 porposed 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 occurrences, 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 experiements 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 implementating procedures of the Radiological Emergency Plan and the Industrial Security Program on an annual basis.

j. Review adequacy of employee training programs and recommend change.

5. Authority

The PORC shall be advisory to the plant superintendent.

6. Records

Minutes shall be kept for all PORC meetings with copies sent to Director, Power Production; Chief, Nuclear Generation Branch; Chairman, NSRB.

7. Procedures

Written administrative procedures for committee operation shall be prepared and maintained describing the method for submission and content of presentations to the committee, review and approval by members of committee actions, dissemination of minutes, agenda and scheduling of meetings.

c.

6.3 Procedures

A. Detailed written procedures, including applicable check-off 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.

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 NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 31
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 November 29, 1979, 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 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. 31 , 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 13, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 31

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:

13
57
362A*
363
364
365
367

2. Marginal lines indicate revised area.

* The change on page 362A is to move, verbatim, the first two paragraphs of Section 6.2 from page 362A to the top of page 363.

3. Add the following new pages:

363A
364A

SAFETY LIMIT	LIMITING SAFETY SYSTEM SETTING
1.1 FUEL CLADDING INTEGRITY	2.1 FUEL CLADDING INTEGRITY
C. Whenever the reactor is in the shutdown condition with irradiated fuel in the reactor vessel, the water level shall not be less than 17.7 in. above the top of the normal active fuel zone.	C. Scram and isolation reactor low water level: ≥ 538 in. above vessel zero
	D. Scram--turbine stop valve closure: ≤ 10 percent valve closure
	E. Scram--turbine control valve
	1. Fast closure--Upon trip of the fast acting solenoid valves
	2. Loss of control oil pressure: ≥ 1,100 psig
	F. Scram--low condenser vacuum: ≥ 23 inches Hg vacuum
	G. Scram--main steam line isolation: ≤ 10 percent valve closure
	H. Main steam isolation valve closure --nuclear system low pressure: ≤ 825 psig
	I. Core spray and LPCI actuation--reactor low water level: ≥ 378 in. above vessel zero
	J. HPCI and RCIC actuation--reactor low water level: ≥ 470 in. above vessel zero
	K. Main steam isolation valve closure--reactor low water level: ≥ 470 in. above vessel zero

TABLE 3.2.A
PRIMARY CONTAINMENT AND REACTOR BUILDING ISOLATION INSTRUMENTATION

Minimum No. Operable Per Trip Sys. (1)	Function	Trip Level Setting	Action (1)	Remarks
2	Instrument Channel - Reactor Low Water Level (6)	≥ 538" above vessel zero	A or (B and E)	1. Below trip setting does the following: a. Initiates Reactor Building Isolation b. Initiates Primary Containment Isolation c. Initiates SGTS
1	Instrument Channel - Reactor High Pressure	100 ± 15 psig	D	1. Above trip setting isolates the shutdown cooling suction valves of the RHR system.
2	Instrument Channel - Reactor Low Water Level (B21-N-56A-D, SW #1)	≥ 470" above vessel zero	A	1. Below trip setting initiates Main Steam Line Isolation
2	Instrument Channel - High Drywell Pressure (6) (PS-64-56A-D)	≤ 2.5 psig	A or (B and E)	1. Above trip setting does the following: a. Initiates Reactor Building Isolation b. Initiates Primary Containment Isolation c. Initiates SGTS
2	Instrument Channel - High Radiation Main Steam Line Tunnel (6)	≤ 3 times normal rated full power background	B	1. Above trip setting initiates Main Steam Line Isolation
2	Instrument Channel - Low Pressure Main Steam Line	≥ 825 psig (4)	B	1. Below trip setting initiates Main Steam Line Isolation
2 (3)	Instrument Channel - High Flow Main Steam Line	≤ 140% of rated steam flow	B	1. Above trip setting initiates Main Steam Line Isolation
2	Instrument Channel - Main Steam Line Tunnel High Temperature	≤ 200°F	B	1. Above trip setting initiates Main Steam Line Isolation.

Amendment No. 11, 26,

Must possess an analytical ability for problem solving and data analysis. Must be able to communicate well both orally and in writing and must be able to write investigative reports and prepare written procedures. Must have the ability to secure the cooperation of management, employees and groups in the implementation of safety programs. Must be able to conduct safety presentations for supervisors and employees.

b. Should have experience in safety engineering work at this level or have 3 years experience in safety and/or fire protection engineering. It is desirable that the incumbent be a graduate of an accredited college or university with a degree in industrial, mechanical, electrical or safety engineering or fire protection engineering.

6.0 ADMINISTRATIVE CONTROLS

6.2 REIVEW AND AUDIT

The Manager of Power is responsible for the safe operation of all TVA power plants, including the Browns Ferry Nuclear Plant. The functional organization for Review and Audit is shown in Figure 6.2-1.

Organizational units for the review of facility operation shall be constituted and have the responsibilities and authorities listed below.

A. NUCLEAR SAFETY REVIEW BOARD (NSRB)

1. FUNCTION

The NSRB shall function to provide independent review and audit of designated activities in the areas of:

a. nuclear power plant operations

b. nuclear engineering

c. chemistry and radiochemistry

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. quality assurance practices.

2. COMPOSITION

The NSRB shall be composed of at least five members, including the Chairman. Members of the NSRB may be from the Office of Power or other TVA organizations, or external to TVA.

3. QUALIFICATIONS

The Chairman, members, and alternate members of the NSRB shall be appointed in writing by the Manager of Power and shall have an academic degree in engineering or physical science field, or the equivalent; and in addition, shall have a minimum of five years technical experience in one or more areas given in 6.2.A.1. No more than two alternates shall participate as voting members in NSRB activities at any one time.

4. CONSULTANTS

Consultants shall be utilized as determined by the NSRB Chairman to provide expert advice to the NSRB.

5. MEETING FREQUENCY

The NSRB shall meet at least once per six months.

6. QUORUM

The minimum quorum of the NSRB necessary for the performance of the NSRB review and audit functions of these technical specifications shall consist of more than half of the NSRB membership or at least five members, whichever is greater. The quorum shall inlcude the Chairman or his appointed alternate and the NSRB members including appointed alternate members meeting the requirements of 6.2.A.3. No more than a minority of the quorum shall have line responsibility for operation of the unit.

7. REVIEW

The NSRB shall review:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

d. Proposed changes to Technical Specifications or this Operating License.

e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

g. All written reports requiring 24-hour notification to the Commission.

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.

k. The radiological environmental monitoring program and the results thereof at least once per 12 months.

l. The performance of activities required by the Quality Assurance Program to meet the criteria of Regulatory Guide 4.15, December 1977 at least once per 12 months.

9. AUTHORITY

The NSRB shall report to and advise the Manager of Power on those areas of responsibility specified in Sections 6.2.A.7 and 6.2.A.8.

10. RECORDS

Records of NSRB activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Manager of Power within 14 days following each meeting.

b. Reports of reviews encompassed by Section 6.2.A.7 above, shall be prepared, approved and forwarded to the Manager of Power within 14 days following completion of the review.

c. Audit reports encompassed by Section 6.2.A.8 above, shall be forwarded to the Manager of Power and to the management positions responsible for the areas audited within 30 days after completion of the audit.

B. Plant Operations Review Committee (PORC)

1. Membership

The PORC shall consist of the plant superintendent, assistant plant superintendent, electric maintenance supervisor, mechanical maintenance supervisor, instrument maintenance supervisor, health physics supervisor, operations supervisor, results supervisor, and QA staff supervisor. An assistant plant supervisor may serve as an alternate committee member when his supervisor is absent.

The plant superintendent will serve as chairman of the PORC. The assistant plant superintendent will serve as chairman in the absence of the plant superintendent.

2. Meeting Frequency

The PORC shall meet at regular monthly intervals and for special meetings as called by the chairman or as requested by individual members.

3. Quorum

Superintendent or assistant superintendent, plus five of the seven other members, or their alternate, will constitute a quorum. A member will be considered present if he is in telephone communication with the committee.

j. Review adequacy of employee training programs and recommend change.

5. Authority

The PORC shall be advisory to the plant superintendent.

6. Records

Minutes shall be kept for all PORC meetings with copies sent to Director, Power Production; Chief, Nuclear Generation Branch; Chairman, NSRB.

7. Procedures

Written administrative procedures for committee operation shall be prepared and maintained describing the method for submission and content of presentations to the committee, review and approval by members of committee actions, dissemination of minutes, agenda and scheduling of meetings.

c.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 58 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 31 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

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

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

1.0 Introduction

By letter dated November 29, 1979 (TVA BFNP TS 132), the Tennessee Valley Authority (the licensee or TVA) requested changes to the Technical Specifications (Appendix A) appended to Facility Operating License Nos. DPR-33, DPR-52, and DPR-68 for the Browns Ferry Nuclear Plant, Units Nos. 1, 2 and 3. The proposed amendments and revised Technical Specifications would change subsection 6.2 of the Administrative Controls Section of the Technical Specifications to increase the duties and functions of TVA's Nuclear Safety Review Board (NSRB) and to increase the designated membership on the Plant Operations Review Committee from seven to nine functional representatives. By letter dated January 4, 1980, TVA advised us that there was a typographical error in their submittal of August 6, 1979 and a typographical error in their submittal of August 27, 1979 - in sections of the Technical Specifications for which they had not requested any revisions. These two typographical errors were incorporated in Amendment Nos. 26 and 28 to Operating License DPR-68 which we issued on November 9, 1979 and November 30, 1979, respectively.

2.0 Discussion

TVA's Nuclear Safety Review Board (NSRB) reports directly to the Manager of Power. The function of the NSRB is to provide independent review and audit of (1) operations, (2) proposed changes to procedures, Technical Specifications, equipment, systems, tests and experiments, (3) violations of codes regulations, orders, Technical Specifications, license requirements or of internal procedures or instructions, (4) deviations from normal and expected performance of equipment, (5) quality assurance and (6) training. The NSRB performs these functions for all TVA nuclear facilities.

The proposed Technical Specifications for the Sequoyah Nuclear Plant are based on the "Standard" Technical Specifications for Light Water Reactors. During the staff's review of the Sequoyah Technical Specifications, the

staff proposed - and TVA accepted - the principal that the NSRB should have responsibility for all reviews and audits, including review and audit of the quality assurance program, fire protection, security, emergency planning, etc. (In the present Browns Ferry Technical Specifications, the latter are listed as being performed by separate groups). Section 6.5.2 of the Sequoyah Technical Specifications, which describes the duties and functions of the NSRB, has been accepted by the staff. Since there is only one NSRB for all TVA nuclear facilities, the inconsistency between the duties and functions of the NSRB in the Sequoyah Technical Specifications vs those in the Browns Ferry Technical Specifications indicated a need to review and probably revise the latter. As a result of such a review, TVA has proposed the changes which are the subject of this Safety Evaluation.

3.0 Evaluation

Section 6.2 of the Browns Ferry Technical Specifications describes the duties and functions of the three groups within TVA responsible for reviews and audits of the Browns Ferry Nuclear Plant. These three groups presently are the NSRB and the Quality Assurance and Audit Staff, which report to the Manager of Power, and the Plant Operations Review Committee, which reports to the plant superintendent. The changes to Section 6.2 proposed by TVA would make the duties and functions of the NSRB in the Browns Ferry Technical Specifications the same as the duties and functions of the NSRB in the draft Sequoyah Technical Specifications. We have compared the proposed duties and functions of the NSRB with those presently listed in the Technical Specifications. The proposed duties and functions encompass all that are presently listed with one minor exception. The present Technical Specifications require the NSRB to review proposed changes to equipment, systems or procedures which are described in the Final Safety Analysis Report (FSAR). The proposed duties would only require NSRB review for those changes which involve an unreviewed safety question or review to the extent necessary to verify that such actions do not constitute an unreviewed safety question. We find this distinction in duties to be acceptable. The proposed duties and functions of the NSRB would encompass the duties and functions now shown for the Quality Assurance and Audit Staff (Section 6.2.C). The change would not require the NSRB to actually perform the audits; the audits "shall be performed under the cognizance of the NSRB" and the results will be reviewed by the NSRB. The proposed changes would also assign responsibility to the NSRB for review and audit of several programs which at present are only reviewed at the plant level, including the "Facility Fire Protection Program", the "Plant Physical Security Plan" and the "Site Radiological Emergency Plan". We conclude that the addition of these duties to the NSRB is both desirable and acceptable.

We have reviewed the changes to the duties and functions of the NSRB proposed by TVA. We find that they encompass all of the duties and functions now specified in the Technical Specifications plus additional desirable duties and functions. On the above basis, we conclude that the proposed changes are acceptable.

TVA has also proposed a change in the functional offices designated for membership on the Plant Operations Review Committee. Specifically, the change would substitute for the overall maintenance supervisor the mechanical maintenance supervisor, the electrical maintenance supervisor and the instrument maintenance supervisor. This would increase the membership from seven to nine functional representatives. There would be no change in the other functions required to be represented (e.g., health physics supervisor, QA staff supervisor, et al). Because of the increase in the size of the PORC, the number of members constituting a quorum has been increased from five to six, one of whom must be the Superintendent or Assistant Superindentent. We conclude that the increased technical coverage on the PORC should result in more in-depth review of maintenance activities. We conclude that the proposed change is acceptable.

The other changes being effected by these amendments are correction of two typographical errors as described in the Introduction on pages 13 and 57 of the Technical Specifications for Unit No. 3. The low pressure setpoint for the closure of the main steam isolation valves was erroneously listed as 850 psig whereas the correct valve, as reflected in the Unit 1 and 2 Technical Specifications, is 825 psig.

4.0 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.

5.0 Conclusion

We have concluded based on the considerations discussed above that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered

by operation in the proposed manner, and (3) 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.

Dated: February 13, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-259, 50-260 AND 50-296

TENNESSEE VALLEY AUTHORITY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 58 to Facility Operating License No. DPR-33, Amendment No. 53 to Facility Operating License No. DPR-52 and Amendment No. 31 to Facility Operating License No. DPR-68 issued to Tennessee Valley Authority (the licensee), which revised Technical Specifications for operation of the Browns Ferry Nuclear Plant, Units Nos. 1, 2 and 3, located in Limestone County, Alabama. The amendments are effective as of the date of issuance.

These amendments change subsection 6.2 of the Administrative Controls Section of the Technical Specifications to increase the duties and functions of TVA's Nuclear Safety Review Board and to increase the designated membership on the Plant Operations Review Committee from seven to nine functional representatives.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which

are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated November 29, 1979, (2) Amendment No. 58 to License No. DPR-33, Amendment No. 53 to License No. DPR-52, and Amendment No. 31 to License No. DPR-68, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Athens Public Library, South and Forrest, Athens, Alabama 35611. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 13th day of February 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors