AUG 18 1976

Docket No. 50-296

Tennessee Valley Authority
ATTN: Mr. Godwin Williams, Jr.
Manager of Power
818 Power Building
Chattanooga, Tennessee 37401

Gentlemen:

ISSUANCE OF AMENDMENT NO. 2 TO FACILITY OPERATING LICENSE FOR BROWNS FERRY NUCLEAR PLANT UNIT 3

The Nuclear Regulatory Commission has issued Amendment No. 2 to Facility Operating License No. DPR-68 to Tennessee Valley Authority. This amendment revises the temporary restrictions contained on page 1a of the Technical Specifications (Appendix A) to permit operation of the Browns Ferry Nuclear Plant Unit 3 at a steady state reactor core power level of 3293 megawatts thermal. This modification to the temporary restrictions from those previously contained in the Technical Specifications appended to the Facility Operating License is based on the satisfactory completion and resolution, as reported by the Commission's Office of Inspection and Enforcement, of the detailed fire protection procedures and the content of the fire training program in accordance with the fire protection criteria delineated in Section 2.0 of Supplement Number 2 to the Safety Evaluation Supporting the Operation After Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire, issued July 3, 1976

A copy of the Notice of Issuance is also enclosed.

Sincerely,

Original Signed by
John F. Stolz

John F. Stolz, Chief
Light Water Reactors Branch No. 1
Division of Project Management

Enclosures:
1. Amendment No. 2 to DPR-68
2. Safety Evaluation
3. Federal Register Notice

OFFICE	cc: See page 2	DPM:LWR #2	DPM:LWR #1	ELD	
SURNAME		SBBurwell:mt	JStolz	L Brame	
DATE		8/16/76	8/16/76	8/17/76	

cc: Mr. Robert N. Marquis
General Counsel
629 New Sprankle Building
Knoxville, Tennessee 37919

Mr. M. Wisenberg
Tennessee Valley Authority
303 Power Building
Chattanooga, Tennessee 37401

Mrs. Maude S. Miller, Librarian
Athens Public Library
South and Forrest
Athens, Alabama 35611

Mr. Richard H. Payne, Head
Environmental Radiation Section
U. S. Environmental Protection Agency
1421 Peachtree Street, N. E.
Atlanta, Georgia 30309

State Department of Public Health
ATTN: State Health Officier
State Office Building
Montgomery, Alabama 36104

Mr. Neil Thomasson (AW-459)
Chief, Energy Systems Analysis Branch
Office of Radiation Programs
U. S. Environmental Protection Agency
401 M Street, S. W.
Washington, D. C. 20460
(2 copies)

Mr. Sheldon Myers
Executive Director of Civil Works
Office of Federal Activities
Environmental Protection Agency
Room W-541, Waterside Mall
401 M Street, S. W.
Washington, D. C. 20460

Colonel Howard Sargent
Executive Director of Civil Works
Office of the Chief of Engineers
Corps of Engineers
Department of the Army
Forrestal Building, Room 4-6060
Washington, D. C. 20314

Mr. Thomas Lee Hammons
Chairman, Limestone County
Board of Revenue
Athens, Alabama 36104

Mr. William E. Garner
Route 4, Box 354
Scottsboro, Alabama 35768

Mr. Bruce Blanchard
Environmental Projects Review
Department of the Interior
Room 5321
18th and C Streets, N. W.
Washington, D. C. 20240

OFFICE ➤						
SURNAME ➤						
DATE ➤						

DISTRIBUTION OF AMENDMENT NO. 2 to DPR-68 FOR BROWNS FERRY 3, DTD 8/18/76

Docket File NR
Local PDR
NRC PDR
Branch File
Attorney, ELD
RCDeYoung
KKniel
JFStolz
SBurwell
JLee
FJWilliams
HSmith
BScott
IE (5)
NDube
MJinks (4)
WMiller
ACRS (16)
HDenton
VAMoore
RHVollmer
MLErnst
WPGammill
RHeineman
JKnight
DFRoss
RLTedesco
AToalston
BScharf (15)
DSkovholt
EHughes
JGill
MSlater
HBristow
VStello
KGoller
JMcGough
DEisenhut
WPasciak

bcc: JRBuchanan, NSIC
Thomas B. Abernathy, TIC
ARosenthal, ASLAB
NHGoodrich, ASLBP

OFFICE ➤						
SURNAME ➤						
DATE ➤						

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 2
License No. DPR-68

1. The Nuclear Regulation Commission (the Commission) having found that:

   A. The issuance of Amendment No. 2 to Facility Operating License No. DPR-68 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 item reported incomplete in Supplement No. 9 to the Safety Evaluation Report has been completed and found satisfactorily resolved as described in the related Safety Evaluation issued August , 1976.

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

   D. 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 rules and regulations of the Commission; and

   E. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
Roger S. Boyd

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachment:
Appendix A - Technical
Specifications, page 1a,
Revision 2.

Date of Issuance:

OFFICE ➤	DPM:LWR #2	DPM:LWR #1	ELD	DPM:DD	DPM	
SURNAME ➤	SBBurwell:mt	JStolz	L. Brown	RCDeYoung	RSBoyd	
DATE ➤	8/16/76	8/16/76	8/17/76	8/ /76	8/18/76	

APPENDIX A, TECHNICAL SPECIFICATIONS

TEMPORARY RESTRICTIONS

There are no temporary restrictions in effect.

Revision 2
August 18, 1976

OFFICE ➤						
SURNAME ➤						
DATE ➤						

Form AEC-318 (Rev. 9-53) AECM 0240 ☆ U. S. GOVERNMENT PRINTING OFFICE: 1974-526-166

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 2
License No. DPR-68

1. The Nuclear Regulation Commission (the Commission) having found that:

   A. The issuance of Amendment No. 2 to Facility Operating License No. DPR-68 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 item reported incomplete in Supplement No. 9 to the Safety Evaluation Report has been completed and found satisfactorily resolved as described in the related Safety Evaluation issued August 18, 1976.

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

   D. 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 rules and regulations of the Commission; and

   E. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachment:
Appendix A - Technical
Specifications, page 1a,
Revision 2.

Date of Issuance: August 18, 1976

APPENDIX A, TECHNICAL SPECIFICATIONS

TEMPORARY RESTRICTIONS

There are no temporary restrictions in effect.

AUG 18 1976

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 2 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT UNIT 3

DOCKET NO. 50-296

Introduction

The U. S. Nuclear Regulatory Commission (Commission) issued Supplement No. 9 to the Safety Evaluation Report of the Tennessee Valley Authority Browns Ferry Nuclear Plant, Units 1, 2 and 3 on August 2, 1976. The scope of that supplement was restricted to our review and evaluation of new information and design changes to the Browns Ferry Nuclear Plant as these apply to Unit 3. Supplement Number 9 addressed four items on which our review was earlier reported incomplete in Supplement Number 8, and found three of the items completed and acceptable. The fourth item concerned fire protection and identified as incomplete the detailed fire protection procedures and fire training program to be prepared by the Tennessee Valley Authority. Supplement Number 9 stated that operation of Browns Ferry Unit 3 would be restricted to one percent or less of rated power until this item was satisfactorily resolved. Accordingly, on August 2, 1976, the Commission issued Amendment No. 1 to the facility operating license. That amendment included in the Appendix A Technical Specifications a temporary restriction limiting operation to one percent or less of rated power until the Commission inspects and reports the satisfactory completion of this item.

Discussion and Evaluation

Supplement Number 9 reported that "Supplement No. 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire" completed our evaluation of fire prevention and protection systems and procedures at the Browns Ferry Nuclear Plant. However, the NRC staff recommended in Supplement No. 2 that the Tennessee Valley Authority be required to complete the detailed fire protection procedures and content of the fire training program before the full power operation of the facility is authorized. Consistent with that recommendation, we imposed with Amendment No. 1 to the facility operating license a temporary restriction in the Appendix A Technical Specifications limiting the operation of Browns Ferry Unit 3 to one percent or less of rated power until the Commission inspects and reports the satisfactory completion of the detailed fire protection procedures and the content of the fire training program in accordance with the fire protection criteria delineated in Section 2.0 of

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DATE ➤						

"Supplement Number 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire," issued July 3, 1976. With that restriction, we concluded the fire prevention and protection for the Browns Ferry Nuclear Plant are acceptable and will provide reasonable assurance that the critical areas of the plant required for a safe reactor shutdown will be adequately protected against the effects of a fire so that safe shutdown capability is maintained.

The Commission's Office of Inspection and Enforcement has inspected and reported the satisfactory completion of this item on August 13, 1976. Accordingly, we are deleting this item from the temporary restrictions given on page 1a revision 1, dated August 2, 1976, of the Appendix A Technical Specifications. At this time no other temporary restrictions are in effect. By issuance of Amendment 2 to Facility Operating License No. DPR-68, the Tennessee Valley Authority is authorized to operate Browns Ferry Unit 3 at steady state reactor core power levels not in excess of 3293 megawatts thermal.

Conclusion

Since this change to the facility operating license is consequent to the satisfactory completion of an outstanding item in conformance with criteria previously reviewed and found acceptable, we conclude the change is administrative in nature and does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. We further conclude, based on the considerations discussed above, that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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DATE ➤						

"Supplement Number 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire," issued July 3, 1976. With that restriction, we concluded the fire prevention and protection for the Browns Ferry Nuclear Plant are acceptable and will provide reasonable assurance that the critical areas of the plant required for a safe reactor shutdown will be adequately protected against the effects of a fire so that safe shutdown capability is maintained.

The Commission's Office of Inspection and Enforcement has inspected and reported the satisfactory completion of this item on August 13, 1976. Accordingly, we are deleting this item from the temporary restrictions given on page 1a revision 1, dated August 2, 1976, of the Appendix A Technical Specifications. At this time no other temporary restrictions are in effect. By issuance of Amendment 2 to Facility Operating License No. DPR-68, the Tennessee Valley Authority is authorized to operate Browns Ferry Unit 3 at steady state reactor core power levels not in excess of 3293 megawatts thermal.

Conclusion

Since this change to the facility operating license is consequent to the satisfactory completion of an outstanding item in conformance with criteria previously reviewed and found acceptable, we conclude the change is administrative in nature and does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. We further conclude, based on the considerations discussed above, that: (1) because the change does not involve a significant increase in the probability or consequences of accidents previously considered and does 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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

OFFICE ➤	LWR 2	ELD	LWR 1			
SURNAME ➤	SBurwell:mt	L. Brenner	JFStolz			
DATE ➤	8/16/76	8/17/76	8/16/76			

AUG 18 1976

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 2 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT UNIT 3

DOCKET NO. 50-296

Introduction

The U. S. Nuclear Regulatory Commission (Commission) issued Supplement No. 9 to the Safety Evaluation Report of the Tennessee Valley Authority Browns Ferry Nuclear Plant, Units 1, 2 and 3 on August 2, 1976. The scope of that supplement was restricted to our review and evaluation of new information and design changes to the Browns Ferry Nuclear Plant as these apply to Unit 3. Supplement Number 9 addressed four items on which our review was earlier reported incomplete in Supplement Number 8, and found three of the items completed and acceptable. The fourth item concerned fire protection and identified as incomplete the detailed fire protection procedures and fire training program to be prepared by the Tennessee Valley Authority. Supplement Number 9 stated that operation of Browns Ferry Unit 3 would be restricted to one percent or less of rated power until this item was satisfactorily resolved. Accordingly, on August 2, 1976, the Commission issued Amendment No. 1 to the facility operating license. That amendment included in the Appendix A Technical Specifications a temporary restriction limiting operation to one percent or less of rated power until the Commission inspects and reports the satisfactory completion of this item.

Discussion and Evaluation

Supplement Number 9 reported that "Supplement No. 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire" completed our evaluation of fire prevention and protection systems and procedures at the Browns Ferry Nuclear Plant. However, the NRC staff recommended in Supplement No. 2 that the Tennessee Valley Authority be required to complete the detailed fire protection procedures and content of the fire training program before the full power operation of the facility is authorized. Consistent with that recommendation, we imposed with Amendment No. 1 to the facility operating license a temporary restriction in the Appendix A Technical Specifications limiting the operation of Browns Ferry Unit 3 to one percent or less of rated power until the Commission inspects and reports the satisfactory completion of the detailed fire protection procedures and the content of the fire training program in accordance with the fire protection criteria delineated in Section 2.0 of

"Supplement Number 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire," issued July 3, 1976. With that restriction, we concluded the fire prevention and protection for the Browns Ferry Nuclear Plant are acceptable and will provide reasonable assurance that the critical areas of the plant required for a safe reactor shutdown will be adequately protected against the effects of a fire so that safe shutdown capability is maintained.

The Commission's Office of Inspection and Enforcement has inspected and reported the satisfactory completion of this item on August 13, 1976. Accordingly, we are deleting this item from the temporary restrictions given on page la revision 1, dated August 2, 1976, of the Appendix A Technical Specifications. At this time no other temporary restrictions are in effect. By issuance of Amendment 2 to Facility Operating License No. DPR-68, the Tennessee Valley Authority is authorized to operate Browns Ferry Unit 3 at steady state reactor core power levels not in excess of 3293 megawatts thermal.

Conclusion

Since this change to the facility operating license is consequent to the satisfactory completion of an outstanding item in conformance with criteria previously reviewed and found acceptable, we conclude the change is administrative in nature and does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. We further conclude, based on the considerations discussed above, that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-296

TENNESSEE VALLEY AUTHORITY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY

OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 2 to Facility Operating License No. DPR-68 issued to Tennessee Valley Authority which revised Technical Specifications for operation of the Browns Ferry Nuclear Plant, Unit 3, located in Limestone County, Alabama. The amendment is effective as of its date of issuance.

A full-power, full-term operating license was issued on July 2, 1976. Activities were limited temporarily by restrictions contained in the Technical Specifications to fuel loading and associated control rod motion necessary to assure fuel loading in a safe manner until the following matters have been resolved: (1) approval by the Commission's staff of certain matters relating to fire prevention and protection; (2) approval by the Commission's staff of the evaluation of (a) suppression pool hydrodynamic loads during a loss-of-coolant accident; and (b) dynamic loads associated with relief valve operation; (3) approval by the Commission's staff of evaluation of the performance of the modified residual heat removal pumps during a postulated loss-of-coolant accident; and (4) a report by the Commission's Office of Inspection and Enforcement that the following matters have been satisfactorily resolved: (a) the

reported clogged waterlines to the residual heat removal and control rod pump bearing coolers; and (b) the installation of a second isolation valve in the 1-inch demineralized water system pipe that penetrates the drywell.

These matters were addressed in the Commission's Supplement No. 9 to the Safety Evaluation Report issued August 2, 1976. On that date, the Commission issued Amendment No. 1 to the facility operating license limiting operation to 1 percent power by deleting and replacing the above temporary restrictions with a single new temporary restriction relating to the completion of the detailed fire protection procedures and training program by the Tennessee Valley Authority.

This amendment deletes the temporary restriction contained in Amendment No. 1 thus authorizing operation of the Browns Ferry Nuclear Plant Unit 3 at a steady state reactor core power level of 3293 megawatts thermal. Deletion of this temporary restriction is based on the satisfactory completion and resolution, as reported by the Commission's Office of Inspection and Enforcement, of the detailed fire protection procedures and the content of the fire training program in accordance with the fire protection criteria delineated in Section 2.0 of "Supplement Number 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire," issued July 3, 1976. This action completes the licensing action encompassed in the "Notice of Consideration of Issuance of Facility Operating Licenses and Notice of

Opportunity for Hearing Pursuant to 10 CFR Part 50, Appendix D, Section C," dated September 15, 1972.

Issuance of the amendment 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 amendment.

For further details with respect to this action, see (1) Amendment No. 2 to License No. DPR-68, and (2) the Commission's related Safety Evaluation dated August 18, 1976. 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.

A copy of items (1) and (2) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

Dated at Bethesda, Maryland, this 18th day of August, 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz

John F. Stolz, Chief
Light Water Reactors
Branch No. 1
Division of Project Management