



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

August 30, 2013

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street, LP 3D-C  
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3 - ISSUANCE OF AMENDMENTS REGARDING DELETION OF REFERENCES TO THE ASME CODE SECTION XI, INCORPORATION OF REFERENCES TO THE ASME OPERATION AND MAINTENANCE CODE, AND EXTENSION OF SURVEILLANCE INTERVALS TO ACCELERATED FREQUENCIES IN THE INSERVICE TESTING PROGRAM (TAC NOS. ME9485, ME9486, AND ME9487)

Dear Mr. Shea:

The Commission has issued the enclosed Amendment Nos. 283, 310 and 269 to Renewed Facility Operating Licenses Nos. DPR-33, DPR-52, and DPR-68 for the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, respectively. These amendments are in response to the Tennessee Valley Authority's application dated August 28, 2012, as supplemented by letter dated August 29, 2013.

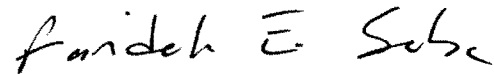
The amendments replace the references to Section XI of the American Society of Mechanical Engineers Code (ASME) Boiler and Pressure Vessel Code with the references to the ASME Code for Operation and Maintenance of Nuclear Power Plants in the BFN Units 1, 2, and 3 Technical Specification (TS) 5.5.6, "Inservice Testing Program," paragraphs a and d. The amendments also revise TS 5.5.6b by applying a 25-percent extension of surveillance interval using the Surveillance Requirement (SR) 3.0.2 provisions to normal and accelerated frequencies specified as 2 years or less in the Inservice Testing Program. These changes are consistent with the Technical Specification Task Force (TSTF) traveler TSTF-479, "Changes to reflect Revision to 10 CFR [Title 10 of *Code of Federal Regulations*] 50.55a," as modified by TSTF-497, "Limit Inservice Testing Program SR 3.0.2 application to Frequencies of 2 Years or Less."

J. Shea

- 2 -

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Nuclear Regulatory Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Farideh E. Saba". The signature is written in a cursive, flowing style.

Farideh E. Saba, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Enclosures:

1. Amendment No. 283  
to License No.DPR-33
2. Amendment No. 310  
to License No.DPR-52
3. Amendment No. 269  
to License No.DPR-68
4. Safety Evaluation

cc w/enclosures: Distribution via Listserv



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 RENEWED FACILITY OPERATING LICENSE

Amendment No. 283  
Renewed 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 August 28, 2012, as supplemented by letter dated August 29, 2013, 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 Renewed Facility Operating License No. DPR-33 is hereby amended as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 283 , 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 its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Doug A. Broaddus", with a large, stylized initial "D" and a long horizontal flourish extending to the right.

Douglas A. Broaddus, Acting Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Operating License  
and Technical Specifications

Date of Issuance: August 30, 2013

ATTACHMENT TO LICENSE AMENDMENT NO. 283

RENEWED FACILITY OPERATING LICENSE NO. DPR-33

DOCKET NO. 50-259

Replace Page 3 of Renewed Operating License DPR-33 with the attached Page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

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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 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 renewed operating 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 3458 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 283, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 234 to Facility Operating License DPR-33, the first performance is due at the end of the first surveillance interval that begins at implementation of the Amendment 234. For SRs that existed prior to Amendment 234, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of Amendment 234.

## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public beyond the site boundary due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.
- k. The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR Section 4.2.5, cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies applicable to the ASME Code for Operations and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as follows:

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(continued)

5.5 Programs and Manuals

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5.5.6 Inservice Testing Program (continued)

<u>ASME OM Code and applicable Addenda terminology for inservice testing activities</u>	<u>Required Frequencies for performing inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- b. The provisions of SR 3.0.2 are applicable to the above required Frequencies and to other normal and accelerated Frequencies specified as 2 years or less in the Inservice Test Program for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ASME OM Code shall be construed to supersede the requirements of any TS.

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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 RENEWED FACILITY OPERATING LICENSE

Amendment No. 310  
Renewed 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 August 28, 2012, as supplemented by letter dated August 29, 2013, 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 Renewed Facility Operating License No. DPR-52 is hereby amended as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 310 , 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 its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Doug A. Broaddus", is written over a horizontal line.

Douglas A. Broaddus, Acting Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Operating License  
and Technical Specifications

Date of Issuance: August 30, 2013

ATTACHMENT TO LICENSE AMENDMENT NO. 310  
RENEWED FACILITY OPERATING LICENSE NO. DPR-52  
DOCKET NO. 50-260

Replace Page 3 of Renewed Operating License DPR-52 with the attached Page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

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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 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 renewed operating 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 3458 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 310, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 253 to Facility Operating License DPR-52, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 253. For SRs that existed prior to Amendment 253, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of Amendment 253.

- 3) The licensee is authorized to relocate certain requirements included in Appendix A and the former Appendix B to licensee-controlled documents. Implementation of this amendment shall include the relocation of these requirements to the appropriate documents, as described in the licensee's

## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public beyond the site boundary due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.
- k. The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR Section 4.2.5, cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies applicable to the ASME Code for Operations and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as follows:

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(continued)

## 5.5 Programs and Manuals

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### 5.5.6 Inservice Testing Program (continued)

<u>ASME OM Code and applicable Addenda terminology for inservice testing activities</u>	<u>Required Frequencies for performing inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- b. The provisions of SR 3.0.2 are applicable to the above required Frequencies and to other normal and accelerated Frequencies specified as 2 years or less in the Inservice Test Program for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities;  
and
- d. Nothing in the ASME OM Code shall be construed to supersede the requirements of any TS.

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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 RENEWED FACILITY OPERATING LICENSE

Amendment No. 269  
Renewed 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 August 28, 2012, as supplemented by letter dated August 29, 2013, 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 Operating license and Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-68 is hereby amended as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 269 , 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 its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read 'Doug A. Broaddus', with a long horizontal flourish extending to the right.

Douglas A. Broaddus, Acting Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Operating License  
and Technical Specifications

Date of Issuance: August 30, 2013



ATTACHMENT TO LICENSE AMENDMENT NO. 269

RENEWED FACILITY OPERATING LICENSE NO. DPR-68

DOCKET NO. 50-296

Replace Page 3 of Renewed Operating License DPR-52 with the attached Page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

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INSERT

5.0-12  
5.0-13

- (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 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 renewed operating 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 3458 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 269 , are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 212 to Facility Operating License DPR-68, the first performance is due at the end of the first surveillance interval that begins at implementation of the Amendment 212. For SRs that existed prior to Amendment 212, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of Amendment 212.

## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public beyond the site boundary due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.
- k. The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR Section 4.2.5, cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies applicable to the ASME Code for Operations and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as follows:

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(continued)

## 5.5 Programs and Manuals

### 5.5.6 Inservice Testing Program (continued)

<u>ASME OM Code and applicable Addenda terminology for inservice testing activities</u>	<u>Required Frequencies for performing inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- b. The provisions of SR 3.0.2 are applicable to the above required Frequencies and to other normal and accelerated Frequencies specified as 2 years or less in the Inservice Test Program for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ASME OM Code shall be construed to supersede the requirements of any TS.

(continued)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 283 TO RENEWED FACILITY OPERATING  
LICENSE NO. DPR-33, AMENDMENT NO. 310 TO RENEWED FACILITY OPERATING  
LICENSE NO. DPR-52, AND AMENDMENT NO. 269 TO RENEWED  
FACILITY OPERATING LICENSE NO. DPR-68  
TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3  
DOCKET NOS. 50-259, 50-260, AND 50-296

1.0 INTRODUCTION

By letter dated August 28, 2012 (Agencywide Documents Access and Management System Accession No. ML12242A477), as supplemented by letter dated August 29, 2013, Tennessee Valley Authority (TVA, the licensee) requested an amendment to the Technical Specifications (TSs) for Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3. The licensee requested changes to TS 5.5.6, "Inservice Testing Program," to provide consistency with the applicable edition and addenda of American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance (OM) of Nuclear Power Plants. TVA also requested to extend the applicability of Surveillance Requirement (SR) 3.0.2 provisions to all normal and accelerated frequencies specified as 2 years or less in the Inservice Testing (IST) Program.

The supplement dated August 29, 2013, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on November 27, 2012 (77 FR 70844).

2.0 REGULATORY EVALUATION

The regulation in Section 50.55a, "Codes and Standards" of Title 10 of the *Code of Federal Regulations* (10 CFR) defines the requirements for applying industry codes to each licensed nuclear powered facility.

In 1990, the ASME published the initial edition of the ASME OM Code, which provides rules for IST of pumps and valves. The ASME OM Code was developed and is maintained by the ASME Committee on OM of Nuclear Power Plants. The ASME OM Code was developed in response to the ASME Board on Nuclear Codes and Standards directive that transferred responsibility for development and maintenance of rules for the IST of pumps and valves from the ASME,

Section XI, Subcommittee on Nuclear Inservice Inspection to the ASME OM Committee and the ASME Code Section XI for IST of pumps and valves in 10 CFR 50.55a was replaced by the ASME OM Code. The Nuclear Regulatory Commission (Commission, NRC) removed references to the ASME Code, Section XI for IST program and the ASME OM Code was incorporated by reference in 10 CFR 50.55a(b)(3).

The Commission's regulations at 10 CFR 50.55a(f)(4) state the requirements thusly:

Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, pumps and valves which are classified as ASME Code Class 1, Class 2, and Class 3 must meet the inservice test requirements, except design and access provisions, set forth in the ASME OM Code and addenda that become effective subsequent to editions and addenda specified in paragraphs (f)(2) and (f)(3) of this section and that are incorporated by reference in paragraph (b) of this section, to the extent practical within the limitations of design, geometry and materials of construction of the components.

Paragraph 10 CFR 50.55a(b) mentioned above provides standards approved for incorporation by reference.

Section 50.55a(f)(4)(ii) of 10 CFR also requires that the IST program be updated during successive 120-month intervals to comply with the latest edition and addenda of the ASME OM Code incorporated by reference into 10 CFR 50.55a(b) 12 months before the start of the 12-month interval.

The Commission's regulations recognize that updates to the code, which through 10 CFR 50.55a(b) are incorporated by reference into the regulations, can result in a conflict between a licensee's plant-specific TSs and the regulations. Thus the Commission promulgated 10 CFR 50.55a(f)(5)(ii), which states that if a revised IST program for a facility conflicts with the technical specification for the facility, the licensee shall apply to the Commission for amendment of the technical specifications to conform the TSs to the revised program. To simplify this process, and reduce the need for license amendments that mimic the regulations, industry developed Technical Specification Task Force (TSTF) traveler TSTF-479, "Changes to Reflect Revision of 10 CFR 50.55a," addressed changes to reflect revision of 10 CFR 50.55a from ASME Code Section XI to ASME OM Code.

TSTF-497-A, "Limit Inservice Testing Program SR 3.0.2 Application to Frequencies of Two Years or Less," revises the Standard Technical Specification (STS) IST Program by clarifying that the provisions of SR 3.0.2 are applicable to testing frequencies specified as 2 years or less in the IST program for performing IST activities.

The BFN 1, 2, and 3 third 10-year interval IST program was revised to meet the requirements of the 1995 Edition through the 1996 Addenda of the ASME OM Code pursuant to 10 CFR 50.55a(f)(4)(ii). However, the BFN TS 5.5.6, "Inservice Testing Program" still references Section XI of the ASME Code for IST requirements. Section 50.55a(f)(5)(ii) of 10 CFR requires that, if a revised IST program for a facility conflicts with the TSs for that facility, the licensee shall apply to the Commission for amendment of the TSs to conform the TSs to the revised program.

In accordance with 10 CFR 50.36(c)(3), TSs include items in the category of SRs. Surveillance requirements are "requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that limiting conditions for operation will be met." Additionally, pursuant to 10 CFR 50.36(c)(5), TSs will include items in the category of "administrative controls." Such items are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner

BFN TS 5.5.6 provides the requirements for the "Inservice Testing Program." The existing TS 5.5.6a lists the testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda. The frequencies listed in TS 5.5.6a range from "weekly" meaning "at least once per 7 days" to biennially meaning "at least once per 731 days." The current BFN TS 5.5.6b allows the provision of SR 3.0.2 to be applicable to test frequencies specified in TS 5.5.6a. BFN SR 3.0.2 permits the licensee to consider a surveillance to be "met" if the surveillance is performed within 1.25 times the interval specified in the surveillance frequency. The license amendment proposes to allow the licensee to apply the 25 percent allowance to other normal and accelerated frequencies in the IST program that are still under 2 years, but not listed in TS 5.5.6a.

### 3.0 TECHNICAL EVALUATION

#### 3.1 The licensee Proposed Changes

The licensee proposed changes to revise the BFN TS 5.5.6a, b, and d. The changes are shown in deletion and addition (bold) as follows:

- a. Testing frequencies **applicable to the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code)** ~~specified in Section XI of ASME Boiler and Pressure Vessel Code and applicable Addenda~~ are as follows:

ASME <del>OM</del> <del>Boiler and Pressure Vessel Code and</del> Applicable Addenda Terminology for inservice <u>testing activities</u>	Required Frequencies for performing inservice activities
---	--
- b. The provisions of SR 3.0.2 are applicable to the above required frequencies **and to other normal and accelerated frequencies specified as 2 years or less in the Inservice Testing Program** for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ASME ~~OM Boiler and Pressure Vessel Code~~ shall be construed to supersede the requirements of any TS.

### 3.2 The NRC Staff Technical Evaluation

The NRC staff reviewed the licensee's requested changes to determine, among other things, if the licensee's operations with the proposed TSs would comply with the applicable regulations. In particular, the NRC staff considered how the proposed changes would 1) address the testing and code standards approved, through rulemaking, for incorporation by reference in 10 CFR 50.55a(b), and 2) the requirement of 10 CFR 50.55a(f)(5)(ii) for the licensee to update its TSs to match the revised IST program (i.e., a program meeting the requirements of 10 CFR 50.55a(f)(4)).

#### 3.2.1 Evaluation of Changes Regarding ASME OM Code

As stated in Section 2 above, changes based on TSTF-479-A address changes to reflect revision of 10 CFR 50.55a from ASME Code Section XI to ASME OM Code. TSTF-479-A revises IST Program Section of STSs to reflect the current edition of the ASME OM Code as specified in 10 CFR 50.55a(b).

The licensee proposed amendments revise TSs 5.5.6a and d for BFN Units 1, 2, and 3 to incorporate the latest edition of ASME OM Code, as required by 10 CFR 50.55a(f)(5)(ii). The Code of Record for the BFN 1, 2, and 3 third 10-year interval IST program is the 1995 Edition through the 1996 Addenda of the ASME OM Code. The NRC staff has determined that the proposed changes to replace references to Section XI of the ASME Boiler and Pressure Vessel Code with updated references to the ASME OM Code in BFN TSs are consistent with TSTF-479-A, and also comply with the requirements of 10 CFR 50.55a(f)(5)(ii). Specifically, the proposed TSs conform to the revised STS IST program. Therefore, the NRC staff has concluded that the revisions to TSs 5.5.6a and d are in accordance with 10 CFR 50.55a(f)(5)(ii) and are acceptable.

#### 3.2.2 Evaluation of Changes to 25 Percent Extension of Surveillance Frequencies

As stated in Section 2 above, the licensee proposed to modify TS 5.5.6b so that the provisions of SR 3.0.2 are applicable to other testing frequencies specified as 2 years or less in the IST program. The licensee's proposed change is consistent with TSTF-497-A.

The 25 percent interval extension, when applied to other testing intervals below 2 years not currently listed in TS 5.5.6a, is consistent with the intention to apply the 25 percent IST interval extension for SR 3.0.2 to test frequencies of 2 years or less and will not create a safety issue. The IST program as specified in TS 5.5.6 with the additional flexibility will continue to assure operation of the facility in a safe manner, as required under 10 CFR 50.36(c)(5). Additionally, the change to TS 5.5.6b does not create a conflict between the revised IST program under 10 CFR 50.55a(f)(4) and the TSs. As discussed previously, the Commission's regulations at 10 CFR 50.55a(f)(5)(ii) require the licensee to conform its TSs to the revised inservice testing program. Therefore, the NRC staff concludes that the proposed change to TS 5.5.6b for BFN Units 1, 2, and 3 continues to satisfy the regulations.



### 3.3 Summary

Based on the above evaluation, the NRC staff finds that the licensee's proposed changes to BFN TSs meet the requirements of 10 CFR 50.55a(f)(5)(ii) and 10 CFR 50.36(c)(5). Therefore, the NRC staff finds the proposed TS changes acceptable.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Alabama State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (77 FR 70844). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: John Y.S. Huang

Date: August 30, 2013

J. Shea

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A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Nuclear Regulatory Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Farideh E. Saba, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Enclosures:

5. Amendment No. 283  
to License No.DPR-33
6. Amendment No. 310  
to License No.DPR-52
7. Amendment No. 269  
to License No.DPR-68
8. Safety Evaluation

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