

ENCLOSURE 1

REVISED PAGES OF RENEWED FACILITY OPERATING LICENSE DPR-33, DPR-52 AND DPR-68

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

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

Replace the following pages of the Renewed Facility Operating Licenses. The revised pages are identified by the date of the letter issuing these pages and contain marginal lines indicating the areas of change.

REMOVE

License DPR-33

Page 4

Page 5

Page 6

License DPR-52

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License DPR-68

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INSERT

License DPR-33

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- (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 application dated September 6, 1996, as supplemented December 11, 1996; April 11, May 1; August 14, October 15, November 5 and 14, December 3, 4, 11, 22, 23, 29, and 30, 1997; January 23, March 12 and 13, April 16, 20, and 28, May 7, 14, 19, and 27, and June 2, 5, 10 and 19, 1998; evaluated in the NRC staff's Safety Evaluation enclosed with this amendment. This amendment is effective immediately and shall be implemented within 90 days of the date of this amendment.
- (4) Mitigation Strategy License Condition  
  
Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:
  - (a) Fire fighting response strategy with the following elements:
    - 1. Pre-defined coordinated fire response strategy and guidance
    - 2. Assessment of mutual aid fire fighting assets
    - 3. Designated staging areas for equipment and materials
    - 4. Command and control
    - 5. Training of response personnel
  - (b) Operations to mitigate fuel damage considering the following:
    - 1. Protection and use of personnel assets
    - 2. Communications
    - 3. Minimizing fire spread
    - 4. Procedures for implementing integrated fire response strategy
    - 5. Identification of readily-available pre-staged equipment
    - 6. Training on integrated fire response strategy
    - 7. Spent fuel pool mitigation measures
  - (c) Actions to minimize release to include consideration of:
    - 1. Water spray scrubbing
    - 2. Dose to onsite responders
- (5) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.
- (6) Deleted.
- (7) Deleted.

- (8) Deleted.
  - (9) Deleted.
  - (10) Deleted.
  - (11) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Browns Ferry Nuclear Plant Physical Security Plan, Training and Qualification Plan, and Contingency Plan," submitted by letter April 28, 2006.
  - (12) Deleted.
  - (13) Browns Ferry Nuclear Plant shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Final Safety Analysis Report for BFN as approved in the safety evaluations dated December 8, 1988; March 31, 1993; April 1, 1993; November 2, 1995; April 25, 2007, and Supplement dated November 3, 1989; subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.
  - (14) The licensee shall maintain the Augmented Quality Program for the Standby Liquid Control System to provide quality control elements to ensure component reliability for the required alternative source term function defined in the Updated Final Safety Analyses Report (UFSAR).
  - (15) The licensee is required to confirm that the conclusions made in TVA's letter dated September 17, 2004, for the turbine building remain acceptable using seismic demand accelerations based on dynamic seismic analysis prior to the restart of Unit 1.
- D. The UFSAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the UFSAR required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, TVA may make changes to the programs and activities described in the supplement without prior Commission approval, provided that TVA evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

- E. The UFSAR supplement, as revised, describes certain future activities to be completed prior to the period of extended operation. TVA shall complete these activities no later than December 20, 2013, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- F. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of the most recent NRC-approved version of the Boiling Water Reactor Vessels and Internals Project (BWRVIP) Integrated Surveillance Program (ISP) appropriate for the configuration of the specimens in the capsule. Any changes to the BWRVIP ISP capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.
- G. (1) During the power uprate power ascension test program and prior to exceeding 30 days of plant operation above a nominal 3293 megawatts thermal power level (100-percent OLTP) or within 30 days of satisfactory completion of steam dryer monitoring and testing that is necessary for achieving 105-percent OLTP (whichever is longer), with plant conditions stabilized at 105-percent OLTP, TVA shall trip a condensate booster pump, a condensate pump, and a main feedwater pump on an individual basis (i.e., one at a time). Following each pump trip, TVA shall confirm that plant response to the transient is as expected in accordance with previously established acceptance criteria. Evaluation of the test results for each test shall be completed and all discrepancies resolved in accordance with corrective action program requirements and the provisions of the power ascension test program.
- (2) Deleted.
- H. The licensee must complete the thirteen (13) Unit 1 restart commitments that are discussed in Appendix F of the license renewal application, dated December 31, 2003, as supplemented by letters dated January 31, 2005, March 2, and April 21, 2006. Completion of these activities must be met prior to power operation of Unit 1.
- I. This renewed license is effective as of the date of issuance and shall expire midnight on December 20, 2033.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By

J. E. Dyer

J. E. Dyer, Director

Office of Nuclear Reactor Regulation

Attachments:

Unit 1 - Technical Specifications - Appendices A and B

Date of Issuance: May 4, 2006

BFN-UNIT 1

Renewed License No. DPR-33

Amendment 272

Revised by letter dated August 16, 2007

application dated September 6, 1996, as supplemented May 1, August 14, November 5 and 14, December 3, 4, 11, 22, 23, 29, and 30, 1997; January 23, March 12, April 16, 20 and 28, May 7, 14, 19, and 27, and June 2, 5, 10 and 19, 1998; evaluated in the NRC staff's Safety Evaluation enclosed with this amendment. This amendment is effective immediately and shall be implemented within 90 days of the date of this amendment.

- (4) Deleted.
- (5) Classroom and simulator training on all power uprate related changes that affect operator performance will be conducted prior to operating at uprated conditions. Simulator changes that are consistent with power uprate conditions will be made and simulator fidelity will be validated in accordance with ANSI/ANS 3.5-1985. Training and the plant simulator will be modified, as necessary, to incorporate changes identified during startup testing. This amendment is effective immediately.
- (6) Mitigation Strategy License Condition  
  
Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:
  - (a) Fire fighting response strategy with the following elements:
    - 1. Pre-defined coordinated fire response strategy and guidance
    - 2. Assessment of mutual aid fire fighting assets
    - 3. Designated staging areas for equipment and materials
    - 4. Command and control
    - 5. Training of response personnel
  - (b) Operations to mitigate fuel damage considering the following:
    - 1. Protection and use of personnel assets
    - 2. Communications
    - 3. Minimizing fire spread
    - 4. Procedures for implementing integrated fire response strategy
    - 5. Identification of readily-available pre-staged equipment
    - 6. Training on integrated fire response strategy
    - 7. Spent fuel pool mitigation measures
  - (c) Actions to minimize release to include consideration of:
    - 1. Water spray scrubbing
    - 2. Dose to onsite responders
- (7) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.

- (8) Deleted.
- (9) Deleted.
- (10) Deleted.
- (11) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Browns Ferry Nuclear Plant Physical Security Plan, Training and Qualification Plan, and Contingency Plan," submitted by letter dated April 28, 2006
- (12) Deleted.
- (13) Deleted.
- (14) Browns Ferry Nuclear Plant shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Final Safety Analysis Report for BFN as approved in the safety evaluations dated December 8, 1988; March 31, 1993; April 1, 1993; November 2, 1995; April 25, 2007, and Supplement dated November 3, 1989; subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.
- (15) The licensee shall maintain the Augmented Quality Program for the Standby Liquid Control System to provide quality control elements to ensure component reliability for the required alternative source term function defined in the Updated Final Safety Analyses Report (UFSAR).

- D. The UFSAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the UFSAR required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, TVA may make changes to the programs and activities described in the supplement without prior Commission approval, provided that TVA evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- E. The UFSAR supplement, as revised, describes certain future activities to be completed prior to the period of extended operation. TVA shall complete these activities no later than June 28, 2014, and shall notify the NRC in writing when

implementation of these activities is complete and can be verified by NRC inspection.

- F. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of the most recent NRC-approved version of the Boiling Water Reactor Vessels and Internals Project (BWRVIP) Integrated Surveillance Program (ISP) appropriate for the configuration of the specimens in the capsule. Any changes to the BWRVIP ISP capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.
- G. This renewed license is effective as of the date of issuance and shall expire midnight on June 28, 2034.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By

J. E. Dyer

J. E. Dyer, Director

Office of Nuclear Reactor Regulation

Attachments:

- 1. Unit 2 - Technical Specifications - Appendices A and B

Date of Issuance: May 4, 2006

- (9) The licensee shall maintain the Augmented Quality Program for the Standby Liquid Control System to provide quality control elements to ensure component reliability for the required alternative source term function defined in the Updated Final Safety Analyses Report (UFSAR).

(10) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
  - 1. Pre-defined coordinated fire response strategy and guidance
  - 2. Assessment of mutual aid fire fighting assets
  - 3. Designated staging areas for equipment and materials
  - 4. Command and control
  - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
  - 1. Protection and use of personnel assets
  - 2. Communications
  - 3. Minimizing fire spread
  - 4. Procedures for implementing integrated fire response strategy
  - 5. Identification of readily-available pre-staged equipment
  - 6. Training on integrated fire response strategy
  - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
  - 1. Water spray scrubbing
  - 2. Dose to onsite responders

- (11) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.

- D. The UFSAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the UFSAR required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, TVA may make changes to the programs and activities described in the supplement without prior Commission approval, provided that TVA evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- E. The UFSAR supplement, as revised, describes certain future activities to be completed prior to the period of extended operation. TVA shall complete these activities no later than July 2, 2016, and shall notify the NRC in writing when



implementation of these activities is complete and can be verified by NRC inspection.

- F. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of the most recent NRC-approved version of the Boiling Water Reactor Vessels and Internals Project (BWRVIP) Integrated Surveillance Program (ISP) appropriate for the configuration of the specimens in the capsule. Any changes to the BWRVIP ISP capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.
- G. This renewed license is effective as of the date of issuance and shall expire midnight on July 2, 2036.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By

J. E. Dyer

J. E. Dyer, Director

Office of Nuclear Reactor Regulation

Attachments:

- 1. Unit 3 - Technical Specifications - Appendices A and B

Date of Issuance: May 4, 2006