



1101 Market Street, Chattanooga, Tennessee 37402

CNL-15-224

October 20, 2015

10 CFR 50.90

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

Subject: **Update to License Amendment Request to Adopt NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants for the Browns Ferry Nuclear Plant, Units 1, 2, and 3 (TAC Nos. MF1185, MF1186, and MF1187) - Revised Implementation Item 49**

- References:
1. Letter from TVA to NRC, "License Amendment Request to Adopt NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants (2001 Edition) (Technical Specification Change TS-480)," dated March 27, 2013 (ML13092A393)
 2. Letter from TVA to NRC, "Response to NRC Request to Supplement License Amendment Request to Adopt NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants for the Browns Ferry Nuclear Plant, Units 1, 2, and 3 (TAC Nos. MF1185, MF1186, and MF1187)," dated May 16, 2013 (ML13141A291)
 3. NRC Electronic Mail from Farideh Saba (NRC) to Gordon Williams (TVA), Clinton Szabo (TVA), and Edward Schrull (TVA), "NFPA 805 Draft SE Issues regarding to implementation 49," dated October 14, 2015 (ML15288A107)

By letter dated March 27, 2013 (Reference 1), Tennessee Valley Authority (TVA) submitted a license amendment request (LAR) for Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, to transition to National Fire Protection Association Standard (NFPA) 805. In addition, by letter dated May 16, 2013 (Reference 2), TVA provided information to supplement the Reference 1 letter.

During a telephone conversation on October 5, 2015, the NRC requested that TVA revise BFN NFPA 805, LAR, Attachment S, "Modifications and Implementation Items," Table S-3, "Implementation Items," Implementation Item 49, to include specific acceptance criteria related to BFN Residual Heat Removal (RHR) heat exchanger fouling testing. By electronic mail dated October 14, 2015 (Reference 3), the NRC provided the requested wording for Implementation Item 49. The enclosure to this letter provides the updated Table S-3 page incorporating the revised Implementation Item 49.

Consistent with the standards set forth in Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50.92(c), TVA has determined that the additional information, as provided in this letter, does not affect the no significant hazards consideration associated with the proposed application previously provided in Reference 1.

There are no new regulatory commitments contained in this submittal. Please address any questions regarding this submittal to Mr. Edward D. Schrull at (423) 751-3850.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 20th day of October 2015.

Respectfully,

J. W. Shea

Digitally signed by J. W. Shea
DN: cn=J. W. Shea, o=Tennessee Valley
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J. W. Shea
Vice President, Nuclear Licensing

Enclosure: NFPA 805 License Amendment Request, Attachment S, Table S-3,
"Implementation Items," Replacement Page Containing Revised Implementation
Item 49

cc (Enclosure):

NRC Regional Administrator – Region II
NRC Senior Resident Inspector – Browns Ferry Nuclear Plant
NRC Project Manager - Browns Ferry Nuclear Plant
State Health Officer, Alabama State Department of Health
NRC Branch Chief - Region II

ENCLOSURE

**Tennessee Valley Authority
Browns Ferry Nuclear Plant, Units 1, 2, and 3**

**NFPA 805 License Amendment Request,
Attachment S, Table S-3, "Implementation Items,"
Replacement Page Containing Revised
Implementation Item 49**

(2 pages including cover)

Table S-3 Implementation Items

| Item | Unit | Description | LAR Section / Source |
|------|-------|--|---|
| 43 | 1,2,3 | Revise the procedure NPG-SPP-18.4.8, Control of Ignition Sources (Hot Work), to incorporate corrective actions identified in MDQ0009992013000160. | 4.1 and Attachment A, 3.3.1.3.1 |
| 45 | 1,2,3 | Revise procedures NPG-SPP-18.4.7, Control of Transient Combustibles, and NPG-SPP-18.4.8, Control of Ignition Sources (Hot Work), to strengthen risk and defense in-depth administrative controls (e.g., no storage and no hot work designated areas). | Attachment C and V |
| 46 | 1,2,3 | Verification of the condition of electrical cabinet doors to meet Fire Modeling Assumptions will be included in the monitoring Program. | Response to RAI PRA 01.d.i |
| 47 | 1,2,3 | Perform a focused-scope peer review of the Fire PRA. The peer review will include, as a minimum, the following elements: Fire PRA Cable Selection and Location (CS), Human Reliability Analysis (HRA), Fire Risk Quantification (FQ), Uncertainty and Sensitivity Analysis (UNC), Accident Sequence Analysis (AS), and LERF Analysis (element LE-C6). Any focused scope peer review Finding level Facts and Observations (F&Os) will be resolved prior to self-approval of post-transition changes. | Response to RAI PRA 11.a, b and c, PRA RAI 23.d and PRA RAI 24 Part b |
| 48 | 1,2,3 | Develop and deliver training to Fire Operations on incipient detection systems alarm response procedures. | Response to FPE RAI 10, Revision 1 |
| 49 | 1,2,3 | Revise the program that monitors BFN Residual Heat Removal (RHR) heat exchanger performance for consistency with the assumptions of the NFPA 805 Net Positive Suction Head (NPSH) analysis. The monitoring program shall include verification that the tested worst fouling resistance, with measurement uncertainty added, of all BFN Units 1, 2, and 3 RHR heat exchangers is less than the design value of 0.001517 hr-ft ² -°F/BTU and the worst tube plugging is less than 4.57 percent. | Attachment X / NRC electronic mail from F. Saba (NRC) to G. Williams (TVA) and C. Szabo (TVA), "Browns Ferry NFPA 805 LAR," dated June 10, 2015 / NRC electronic mail from F. Saba (NRC) to G. Williams (TVA), C. Szabo (TVA), and E. Schull (TVA), "NFPA 805 Draft SE Issues regarding to implementation 49," dated October 14, 2015 |