

Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

July 3, 2013

10 CFR 55.5

Mr. Victor M. McCree Regional Administrator U.S. Nuclear Regulatory Commission Marquis One Tower 245 Peachtree Center Avenue, NE, Suite 1200 Atlanta, Georgia 30303-1257

Attention: Mark E. Franke

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

#### Subject: Reactor Operator and Senior Reactor Operator Initial License Written Examinations - Post Examination Response

The Tennessee Valley Authority (TVA) administered the final NRC Written Examination for the Browns Ferry Nuclear Plant Reactor Operator and Senior Reactor Operator Initial License Training (ILT) Class 1306 on June 28, 2013. The supporting documentation specified by Section ES-501 of NUREG 1021, Revision 9, Supplement 1, "Operator Licensing Examination Standards for Power Reactors," for Post Examination Activities is enclosed. The enclosures' content listing is provided at the end of this letter.

Analysis of the preliminary facility graded written examination results indicated ten questions; numbers 2, 23, 25, 34, 55, 64, 73, 79, 85, and 90, had a 50 percent or greater failure rate. The results of this analysis, where applicable, will be forwarded to the ILT Supervisor for potential inclusion in the appropriate training material.

Additionally, the Licensee is submitting three post-operating exam comments per ES-501, Attachment 1.

Victor M. McCree Page 2 July 3, 2013

The NRC Form ES-201-3, will be forwarded to the NRC as soon as it is completed. The enclosures to this letter are considered by TVA to be of a personal nature and, as such, are requested to be withheld from public disclosure in accordance with 10 CFR 2.390(a)(6).

There are no commitments contained within this letter. If you have any questions or comments, please telephone Mr. Michael D. Gibson at (256) 729-2783.

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Enclosures:

- Enclosure 1 Form ES-403-1, Written Examination Grading Quality Checklist
- Enclosure 2 Graded Written Examinations (Each Applicant's Original Answer and Examination Cover Sheets) and a Clean Copy of Each Applicant's Answer Sheet
- Enclosure 3 Questions Asked By and Answers Given to the Applicants During the Written Examination
- Enclosure 4 Examination Seating Chart
- Enclosure 5 Results of Any Written Examination Performance Analysis that was Performed
- Enclosure 6 Facility Comments made in accordance with ES-501 Attachment 1

Victor M. McCree Page 2 July 3, 2013

### JEE:SWA:CSP Enclosures

bcc: (w/o Enclosure) S. M. Douglas, LP 3R-C D. L. Hughes, POB 2E-BFN D. Laing, BFT 3A-BFN M. T. Nabors, BFT 1A-BFN J. W. Shea, LP 3R-C P. R. Wilson, LP 3R-C C. L. Vaughn, BFT 1A-BFN EDMS, WT 3B-K Enclosure 6

Browns Ferry Nuclear Plant Units 1, 2, and 3

Reactor Operator and Senior Reactor Operator Initial License Operating Examination - Post Examination Response

Facility Comments Made in Accordance With ES-501 Attachment 1

(See Attached)

# JPM Post Exam Comments

## JPM E

**Comment:** JPM Step 6 change step from Critical to NOT Critical. Placing Manual TIP Drive Control Switch to OFF is a procedure step to control alignment. When TIP is moving toward In-Shield position a limit switch turns off detector drive. Step places TIP Drive Control Switch in a known configuration.

JPM Step 12 change step from Critical to NOT Critical. Placing all 5 TIP Manual Valve Control switches to closed is NOT critical for JPM C and E. The valve automatically closed for TIP C and for TIP E the valve failed to close and the SHEAR Valve had to be activated.

# ADMIN JPM COO-2 or RO A1b on Unit 2 and 3

**Comment:** JPM Step 5 change step from Critical to NOT Critical the applicability for this step is NOT met. The Applicability for this step is "MODE 5 with the Reactor Mode Switch in the Refuel Position and any Control Rod withdrawn or MODE 4 when in Special Operation LCO 3.10.4". The plant was in MODE 5 with NO Control Rods withdrawn. The applicant could record SAT or NA.

JPM Step 8 change step from Critical to NOT Critical. The critical portion was to subtract a given number in Column A from a given number in Column B to determine if inadequate mixing or stratification was occurring in the RPV. With vessel head removed and cavity flooded to greater than 22 feet above RPV flange inadequate mixing could not occur due to natural circulation.

# ADMIN SRO JPM COO-1 or SRO A1a

**Comment:** JPM Step 1, there is a TYPO in the standard for this step. The submitted standard READ "Evaluates Schedules and determines RO1 is NOT in compliance with Fatigue Rule. RO 1 exceeded 72 work hours in any 7 day period. RO1 is not in compliance with this part of the fatigue rule at **1100** on 4/20". The 1100 on 4/20 should be **1500** on 4/20.