

May 21, 2008

Mr. William R. Campbell, Jr.
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT UNIT 1 - IMPLEMENTATION
OF MITIGATING SYSTEMS PERFORMANCE INDICATORS

Dear Mr. Campbell:

The purpose of this letter is to document discussions between the Nuclear Regulatory Commission (NRC) staff and the Tennessee Valley Authority (TVA, the licensee) staff regarding the transition of Browns Ferry Nuclear Plant (BFN) Unit 1 into the Reactor Oversight Process (ROP). Unit 1 was unique in the ROP due to its restart in May 2007 after being shut down for more than 20 years. Since the plant lacked the recent operating experience needed to calculate several performance indicators (PIs) in the ROP, the NRC established an augmented baseline inspection plan for those cornerstones with PIs that did not have sufficient data to validate the indicator.

In a letter dated January 7, 2008, the licensee provided the results of its review of the implementation of one of the PIs for Unit 1, the Mitigating Systems Performance Index (MSPI). TVA noted that it had not been able to identify a methodology for reporting a MSPI value for the five systems covered by the MSPI that would be able to provide the NRC a basis for making regulatory decisions on oversight.

TVA did indicate, however, that an approximated MSPI could be generated using a plant-specific calculator (i.e., Excel spreadsheet), supplemented with BFN Unit 2 data. TVA also indicated that for data that crosses an MSPI performance threshold, TVA would generate a Problem Evaluation Report and perform an appropriate evaluation consistent with the requirements of Title 10 of the *Code of Federal Regulations*, Part 50, Appendix B, Criterion XVI, Corrective Action.

Based on TVA's letter, and subsequent discussions between TVA and the NRC staff, the NRC has determined that oversight of the Unit 1 MSPI will be implemented in the following fashion:

- Beginning with the 3rd Quarter of 2010 (due in October 2010), all reported Unit 1 MSPI data will be considered fully valid, along with the appropriate colors, for assessing plant performance in accordance with Inspection Manual Chapter (IMC) 0305, Operating Reactor Assessment Program.
- In the interim, Unit 1 MSPI data will be submitted quarterly to the NRC, beginning with the 2nd quarter PI data submittals, which are due by July 21, 2008.
- The Unit 1 MSPI summary results on the PI page of the NRC public website will remain gray until the 3rd quarter of 2010.

- In the interim, all graphs that display the Unit 1 MSPI data will be stripped of color, thresholds, and threshold lines; the MSPI trend line will remain, consisting of the value of the data points and values along the Y-axis.
- Due to software limitations, the NRC will manually load MSPI data onto the NRC web page every quarter during this gray transition period.
- Each Unit 1 MSPI shall include a boilerplate statement, provided by the licensee, that describes the assessment implications and reporting requirements of MSPI data during this gray transition period. The statement should read as follows:

Beginning the 2nd quarter 2008, the data reported reflects a lack of historical operational data needed to maintain the adequate degree of accuracy required by this PI. Until further notice, MSPI performance threshold crossings will be assessed by the NRC Unit 1 augmented baseline inspection plan.

- The existing MSPI performance thresholds used for Units 2 and 3 will be applicable for Unit 1.
- Verification of the interim Unit 1 MSPI performance indicators will be conducted in accordance with the Unit 1 augmented baseline inspection plan and Inspection Procedure 71151, Performance Indicator Verification. Any identified Unit 1 performance deficiencies will be screened in accordance with the ROP.
- Follow-up inspection(s) by the NRC for any system(s) that crosses an MSPI performance threshold will be conducted in accordance with the Browns Ferry Unit 1 Augmented Inspection Plan.
- Any inspection findings identified by an augmented baseline inspection will be characterized using the ROP significance determination process using the Unit 2 notebook with any needed plant-specific adjustments handled through the Region II senior risk analysts. Subsequent followup of any significant inspection findings will be conducted according to IMC 0305, Operating Reactor Assessment Program, and/or IMC 2515, Light-Water Reactor Inspection Program – Operations Phase, which may require a supplemental inspection.

The NRC plans to implement this MSPI plan for Unit 1 commencing July 21, 2008, with the submittal of the 2nd quarter 2008 data. The NRC staff discussed this letter with Mr. James Emens of your staff and it was agreed that a response acknowledging understanding of the MSPI methodology will be provided by June 27, 2008. If there are any questions, please contact Jim Andersen (301-415-3565) or John Thompson (301-415-1011) of the Division of Inspection and Regional Support.

Sincerely,

/RA/

Timothy J. McGinty, Acting Director
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-259

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Letter to William R. Campbell, Jr., from Timothy J. McGinty dated May 21, 2008

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MITIGATING SYSTEMS PERFORMANCE INDICATORS

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