

September 2, 2005

LICENSEE: Tennessee Valley Authority

FACILITIES: Browns Ferry Nuclear Plant, Units 1, 2, and 3

SUBJECT: SUMMARY OF AUGUST 10, 2005, MEETING WITH THE TENNESSEE VALLEY AUTHORITY REGARDING PLANT-SPECIFIC RESOLUTION OF INSTRUMENT SETPOINT CONCERNS (TAC NOS. MC1330, MC1427, MC2305, MC3812, MC4070, MC4071, MC4072, MC4161, MC3743, AND MC3744)

On August 10, 2005, the U.S. Nuclear Regulatory Commission (NRC) staff met with Tennessee Valley Authority (TVA, the licensee) at NRC Headquarters in Rockville, Maryland. The objective of the meeting was to discuss a TVA specific proposal for resolving the instrument setpoint concern for several licensing actions currently under NRC review. The licensee indicated that the scope would be limited to a Browns Ferry Nuclear Plant (BFN) specific resolution. The meeting was open to the general public. Enclosure 1 contains a list of attendees, and Enclosure 2 is a copy of the introductory comments, and Enclosure 3 is a copy of TVA's handout. Enclosure 2 is being provided at the request of a member of the public.

BACKGROUND

On June 2, 2005, the NRC staff met with the Nuclear Energy Institute (NEI) Setpoint Methods Task Force (SMTF) to discuss setpoints and allowable values for safety-related instrumentation. The intent was to get NRC staff feedback on seven technical specification (TS) concepts discussed in the enclosure of the NEI (A. Marion) letter dated May 18, 2005, to J. E. Lyons (Office of Nuclear Reactor Regulation). The seven concepts were developed by the NEI SMTF as an approach to resolving staff setpoints concerns identified in the NRC (J. E. Lyons) letter dated March 31, 2005 (ML050870008), to A. Marion. The meeting provided an opportunity for NEI and the NRC staff to meet and discuss the NRC staff's concern with respect to TS operability, and satisfying Title 10, Code of Federal Regulations (10 CFR) Section 50.36(c)(1)(ii)(A) and 10 CFR 50.36(c)(3). The staff stated that operability needs to be assessed, in part, based on the ability of the system to initiate automatic protective actions as required to protect the safety limit (SL) (i.e., satisfy its safety function) and surveillance testing needs to demonstrate that the equipment is functioning as expected. As the completion of the generic effort may not meet TVA's need dates for several licensing actions, TVA elected to move forward with a TVA specific proposal.

DISCUSSION

The licensee began by outlining TVA's understanding of the NRC's concerns, and discussing TVA's needs for operational flexibility. The NRC staff inquired about how the licensee treated instrument channels during TS surveillance testing, the licensee's process for determining instrument operability, and how these practices would change based on the proposal. TVA discussed their proposal, which tentatively centers around the inclusion of note(s) in the body of Section 3.0 of the TSs, which designate that, should a limiting safety system setpoint (LSSS) required to protect a SL be found outside the allowable-as-left (AAL) range, the setpoint would

be immediately reset to within the AAL range. This note would refer to TS Section 5.0, Administrative Controls, which would contain a section discussing instrument surveillance testing measures which demonstrate that the equipment is functioning as expected. These measures include the immediate reset of an LSSS instrument for which a TS SL has been found outside the acceptable-as-found (AAF) range. Additionally, this section discusses the process, for evaluating the operability and the capability to perform its intended function, for those instruments found outside the AAL and AAF. The NRC staff discussed the specific language and location within the TS for the actual requirements to perform the instrument reset and evaluations. It was agreed that further discussion of these details would be conducted at a later date.

The NRC staff questioned the duration proposed for out-of-tolerance trending and past operability determinations proposed by TVA. TVA proposed an allowance of 25 percent of the next surveillance interval not to exceed 31 days. The NRC staff discussed maintaining a timeframe commensurate with the safety significance of the concern. TVA indicated that the 25 percent/30 days was a maximum limit and that the licensed operators onshift need for resolution strongly influences the duration of the evaluations that resulted in most evaluations being required sooner.

The proposed language in TS Section 5.0 also included a discussion of TVA's methodology used to determine the setpoint contained in TVA procedure TI-28, Setpoint Calculations. This procedure was included to ensure that LSSS setpoints are consistent with what was approved by the NRC. The NRC staff discussed 10 CFR 50.36 requirements regarding the establishment of the LSSSs within the TSs to protect the SL, and inquired as to whether the allowable values (AVs) listed in the TSs, were calculated to ensure that the SL is protected. The licensee indicated that the LSSSs are not listed within the TSs. The LSSSs are contained within the procedure, and the AV is not the LSSS; however the AV is conservatively set to the LSSS to ensure that the SL is protected. It was also asked why the licensee did not include the LSSS in the TS tables. The licensee indicated that inclusion of these setpoints at this time would result in a change to existing processes and require massive revisions to plant procedures vice this proposal which codifies existing processes with less extensive procedure and process revisions. The NRC staff questioned whether TI-28 was/will be controlled consistent with the requirements for procedures for safety-related or important-to-safety components in 10 CFR Part 50, Appendix B and/or TS 5.4.1.a. The licensee took this question as a follow-up item and ensured that the response would be clarified in the submittal.

The discussion also included how the proposal would be submitted to the NRC staff. As TVA has indicated, the intent to incorporate the proposal for all TS LSSS setpoints established to protect an SL, not just those currently under review in the seven licensing amendment requests, a new submittal would need to be made. This new submittal would request implementation of TVA's proposal for all TS LSSS setpoints established to protect an SL. With the approval of this new submittal, the current seven amendment requests, under review, would only need revisions to those TS pages provided with the initial submittals to reflect the new amendment request approval. The NRC staff indicated that this approach appeared reasonable and additional discussions would be held with TVA to ensure this approach would result in an efficient, effective and timely resolution.

The NRC staff indicated that the information presented was of high quality, at an excellent level of detail and was responsive to all NRC staff questions and concerns regarding TVA's proposed

resolution. At the conclusion of the meeting, the NRC staff and the licensee acknowledged that the meeting was highly beneficial in improving the understanding of the issues. No commitments were made by the licensee and no regulatory decisions were made by the NRC staff during the proceedings.

/RA/

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Office of Nuclear Reactor Regulation

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

Enclosures: 1. List of Attendees
2. Introductory Comments
3. TVA Handout

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NRC-001

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DATE	08/18/05	08/26/05	08/18/05	09/02/05

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SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3 — SUMMARY OF
AUGUST 10, 2005 MEETING WITH TVA REGARDING PLANT SPECIFIC
RESOLUTION OF INSTRUMENT SETPOINT CONCERNS (TAC NOS.
MC1330, MC1427, MC2305, MC3812, MC4070, MC4071, MC4072, MC4161,
MC3743, AND MC3744)

Date: September 2, 2005

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Meeting with Tennessee Valley Authority
Regarding Plant Specific Instrument Setpoint Concern
August 10, 2005

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Introductory Comments

by Eva Brown

Good morning,

My name is Eva Brown and I'm the project manager for Browns Ferry Units 2 and 3. This is a Category 1 meeting between the Nuclear Regulatory Commission [NRC] staff and the Tennessee Valley Authority. The other stakeholders are invited to observe the meeting and will have the opportunity to communicate with the NRC during designated sections and after the business portion of the meeting, but before the meeting is adjourned. We have one member of the public with us via teleconference, and I will be pausing to elicit comments or questions from other stakeholders for the NRC staff at regular intervals.

The purpose of this meeting is to discuss TVA's proposal for a utility-specific resolution to the instrument setpoint concern. During reviews of proposed license amendments that contain changes to LSSS [limiting safety system] setpoints, the NRC staff identified concerns regarding implementation of the method used by some licensees to determine the allowable values (AV) identified in the technical specifications (TSs). The Technical Specifications define Limiting Safety System Settings as an allowable value (AV), and the AVs are identified to provide acceptance criteria for determination of instrument channel operability during periodic surveillance testing.

The NRC staff has determined that to ensure a plant will operate in accordance with the assumptions upon which the plant safety analyses have been based, additional information is required to address the staff's concern with respect to TS operability and satisfying 10 CFR 50.36(c)(1)(ii)(A) and 10 CFR 50.36(c)(3). Operability needs to be assessed, in part, based on the ability of the system to initiate automatic protective actions as required to protect the safety limit (SL) (i.e., satisfy its safety function) and surveillance testing needs to demonstrate that the equipment is functioning as expected.

To address the generic nature of the instrument setpoint concern, the NRC staff and the industry have been in discussions to come to an agreement regarding a generic resolution, in the form of a TS task force change - TSTF. To this end a meeting was recently held on June 2 wherein an industry framework for resolution was proposed. As the completion of the generic effort may not meet TVA's need dates for several licensing actions, TVA has elected to move forward with a TVA-specific proposal.

Please note, that these discussions are not an attempt to come to consensus about the generic resolution of this issue, nor will it be a forum to continue to discuss any differences between the NRC and NEI [Nuclear Energy Institute] regarding the generic resolution proposed. Also, the NRC will not be making a final regulatory finding during this meeting regarding the acceptability of the proposals; and the NRC staff's comments should not be construed as such. The staff will be commenting on whether the proposal made by TVA appears consistent, in concept, with regulatory requirements, staff policies and guidance.

Enclosure 2

The NRC staff, after discussions with TVA, has determined that the following license amendment requests are potentially affected by this concern:

CBrowns Ferry Units 2 and 3 - Extended Power Uprate (TS-418)

CBrowns Ferry Unit 1 - Power Range Neutron Monitor Upgrade (TS-430)

CBrowns Ferry Unit 1 - Extended Power Uprate (TS-431)

CBrowns Ferry Unit 1 - 24 Month Fuel Cycle (TS-433)

CBrowns Ferry Unit 1 - Lowering the Allowable Value for Reactor Vessel Water Level - Low Level 3 (TS-434)

CBrowns Ferry Unit 1 - Scram Discharge Instrument Volume Setpoint Change (TS-437)

CBrowns Ferry Units 1, 2, and 3 - Calibration Interval Extension for HPCI/RCIC Temperature Switches (TS-447)

CSequoyah Units 1 and 2 - Nominal Trip Set points for RPS and ESF instrumentation

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BROWNS FERRY NUCLEAR PLANT

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