UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 10, 2010

LICENSEE: Tennessee Valley Authority

FACILITIES: Browns Ferry Nuclear Plant, Unit 1

SUBJECT: SUMMARY OF JUNE 29, 2010, MEETING REGARDING EXTENSION OF ALLOWED OUTAGE TIME FOR EMERGENCY DIESEL GENERATORS (TAC NOS. ME3423, ME3424, AND ME3425)

On June 29, 2010, members of the U.S. Nuclear Regulatory Commission (NRC) staff met with representatives of the Tennessee Valley Authority (TVA, the licensee) to discuss TVA's proposed license amendment request (LAR) for the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3. The proposed amendment would, in part, change Technical Specification (TS) 3.8.1, "AC [Alternating Current] Sources - Operating," to increase the allowed outage time (AOT) from 7 days to 14 days for the emergency diesel generators (EDGs). Other conforming TSs and bases changes would also be made. The LAR included a section on risk insights to show that the change resulted in a small increase in risk. The LAR also included a set of commitments that would be implemented during an extended outage, such as an EDG overhaul, to minimize risk. The meeting slides can be found in Agencywide Documents Access and Management System (ADAMS) Accession No. ML101830359. A list of attendees is enclosed.

After discussing the proposed changes to the BFN TSs, TVA provided an overview of the BFN electrical distribution system. To facilitate the discussion, TVA provided a system diagram that includes critical equipment loads (ADAMS Accession No. ML101830113). The BFN electrical system has the capability to allow the cross-tie electrical busses in the case of an EDG outage or failure of an EDG to start and load, but some of the busses' power equipment is shared between multiple units. The NRC staff asked several questions about the cross-ties, about EDG loading in the case that busses are cross-tied, and about how bus loading was managed.

The licensee then discussed the probabilistic risk assessment (PRA) that was conducted to support the LAR. TVA stated that it has upgraded the BFN PRA to meet Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," but the staff has not reviewed it. During the acceptance review for the LAR, the staff asked for information on resolution of peer reviewer comments. TVA described the significant features of the upgraded PRA and also discussed the risk impacts of the proposed amendment. The staff stated that it would audit the PRA as part of its overall review of the LAR.

In discussions prior to the meeting, it was acknowledged that the TSs proposed in the LAR were not consistent with the TSs that the staff had approved in similar amendments at other plants.

TVA provided sample TS markups (ADAMS Accession No. ML101830350) as talking points for the meeting. These sample TSs were based on other approved amendments. There was considerable discussion of the interaction between the proposed TSs, or the sample TSs, and the commitments in the LAR regarding equipment availability. At the meeting, TVA stated that it was considering a supplement to the LAR to modify the proposed TSs.

No regulatory decisions were made at the meeting. The staff stated that it was reviewing the LAR and would request additional information as necessary. The staff also stated its position that, in order to extend the AOT for offsite or onsite power, a licensee should have available (can be on a temporary basis) a supplemental AC source capable of powering the loss of offsite power loads for the inoperable power source to achieve cold shutdown of its unit. The time to make the power source available, including accomplishing any required cross-tie, generally should not be more than 1 hour as demonstrated by test. To support the 1 hour time for making this power source available, plants must assess their ability to cope with a station blackout for 1 hour independent of an alternate AC power source. The plant should have formal engineering calculations for equipment sizing and protection, and have approved procedures for connecting temporary power source(s). As a minimum, a supplemental AC source should meet the requirements of NUMARC 87-00, Appendix B. Also, the TSs should contain Required Actions and Completion Times to verify that applicable compensatory actions and configuration risk and management controls are satisfied.

No members of the public were in attendance and no feedback forms were received.

Please direct any inquiries to Christopher Gratton at 301-415-1055, or christopher.gratton@nrc.gov.

Christopher Gratton, Senior Project manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Enclosure: List of Attendees

cc w/enclosure: Distribution via Listserv

LIST OF ATTENDEES

JUNE 29, 2010, PUBLIC MEETING WITH TENNESSEE VALLEY AUTHORITY

EXTENSION OF ALLOWED OUTAGE TIME FOR EMERGENCY DIESEL GENERATORS

BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3

U. S. NUCLEAR REGULATORY COMMISSION
S. Bailey
E. Brown
A. Howe
R. Gallucci
R. Mathew
G. Matharu
M. Kromer
J. Evans
V. Goel

TENNESSEE VALLEY AUTHORITY
J. Sampson
C. Guey
D. Green
T. Cribbe
D. Kearneghan

Enclosure

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/RA/

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