

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 3, 2015

Mr. Joseph W. Shea Vice President, Nuclear Licensing Tennessee Valley Authority 1101 Market Street, LP 3R-C Chattanooga, TN 37402-2801

SUBJECT:

BROWNS FERRY NUCLEAR PLANT, UNIT 1 – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR SAFETY

LIMIT MINIMUM CRITICAL POWER RATIO (CAC NO. MF6760)

Dear Mr. Shea:

By letter dated September 25, 2015, Tennessee Valley Authority (TVA, the licensee) submitted a license amendment request (LAR) for Browns Ferry Nuclear Plant, Unit 1. The LAR proposes to revise the value of the safety limit minimum critical power ratio values for two-loop and single-loop operation.

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. A draft request for additional information (RAI) that contained proprietary markups was e-mailed to the licensee on November 18, 2015. The NRC staff discussed this draft RAI, as well a revised non-proprietary version, during a clarification call with the licensee on November 20, 2015. By an e-mail dated November 23, 2015, the licensee confirmed that the original draft RAI did not contain any proprietary information. In addition, during the conference call TVA agreed to respond to the enclosed RAI by December 31, 2015.

The NRC staff considers that timely responses to RAIs help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources.

If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1447 or <u>Farideh.Saba@nrc.gov</u>.

Sincerely,

Farideh E. Saba, Senior Project Manager

Plant Licensing II-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Parideh E. Sibe

Docket No. 50-259

Enclosure:

Request for Additional Information

cc w/enclosure: Distribution via Listserv

REGARDING LICENSE AMENDMENT REQUEST FOR

SAFETY LIMIT MINIMUM CRITICAL POWER RATIO

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNIT 1

DOCKET NO. 50-259

(CAC NO. MF6760)

By letter dated September 25, 2015 (Agencywide Documents Access and Management System Accession No. ML15268A566), Tennessee Valley Authority submitted a license amendment request (LAR) for Browns Ferry Nuclear Plant, Unit 1 (BFN-1). The LAR proposes to revise the value of the safety limit minimum critical power ratio values for two-loop and single-loop operation.

The Nuclear Regulatory Commission (NRC) staff has reviewed the submitted LAR and determined additional information is needed to complete its review. The purpose of this Request for Additional Information (RAI) is to gain a more detailed understanding of the restrictions in the topical reports referenced. The following RAI describes the additional information needed by the NRC staff.

SRXB RAI-1

In the critical power ratio correlations referenced in the submittal (ANP-10298P-A, Rev. 0, "ACE/ATRIUM 10XM Critical Power Correlation," and EMF-2209(P)(A) Rev. 3, "SPCB Critical Power Correlation"), there is a Safety Evaluation restriction for local peaking factors. Confirm that no rods in the BFN-1 Cycle 12 core are expected to exceed the local peaking factor limit for the range of applicability of the critical power correlations given in Table 2-1 of ANP-10298P. Describe how high-peaking rods are identified.

If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1447 or Farideh.Saba@nrc.gov.

Sincerely,

/RA/

Farideh E. Saba, Senior Project Manager Plant Licensing II-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-259

Enclosure:

Request for Additional Information

cc w/enclosure: Distribution via Listserv

DISTRIBUTION:

PUBLIC
RidsACRS_MailCTR Resource
RidsNrrDpr Resource
RidsNrrDorlLpl2-2 Resource
RidsNrrPMBrownsFerry Resource
RidsNrrDorlDpr Resource

LPL2-2 R/F RidsNrrDssSrxb Resource RidsNrrDorl Resource RidsNrrLABClayton Resource RidsRgn2MailCenter Resource WMacFee, NRR

ADAMS Accession No.: ML15336A726 *by email

OFFICE	DORL/LPLII-2/PM	DORL/LPLII-2/LA	DSS/SRXB/BC*	DORL/LPLII-2/BC	DORL/LPLII-2/PM
NAME	FSaba	BClayton	(<i>GThomas for</i>) CJackson	(<i>RSchaaf for</i>) BBeasley	FSaba
DATE	12/03/2015	12/02/2015	12/03/2015	12/03/2015	12/03/2015

OFFICIAL RECORD COPY