



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

January 20, 2012

Mr. Barry S. Allen
Site Vice President
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
Mail Stop A-DB-3080
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 - REQUEST FOR ADDITIONAL INFORMATION REGARDING THE REACTOR COOLANT SYSTEM PRESSURE AND TEMPERATURE LIMITS REPORT, REVISION 1 (TAC NO. ME7581)

Dear Mr. Allen:

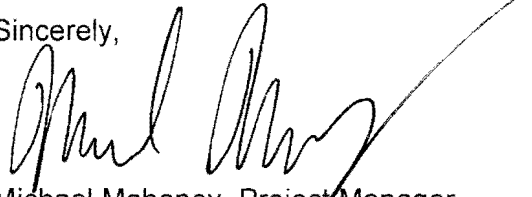
By letter dated October 27, 2011, First Energy Nuclear Operating Company, the licensee for Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS), submitted a revised pressure and temperature limits report in accordance with DBNPS Technical Specification 5.6.4, "Reactor Coolant System Pressure and Temperature Limits Report."

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. During a discussion with your staff on January 17, 2012, it was agreed that you would provide a response within 30 days from the receipt of this letter.

The NRC staff considers that timely responses to requests for additional information 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) 415-3867.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Mahoney", with a long, sweeping flourish extending to the right.

Michael Mahoney, Project Manager
Plant Licensing Branch MI-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1,

PRESSURE AND TEMPERATURE LIMITS REPORT, REVISION 1

By letter dated October 27, 2011, First Energy Nuclear Operating Company (FENOC), the licensee for Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS), submitted a revised pressure and temperature (P-T) limits report in accordance with DBNPS Technical Specification (TS) 5.6.4, "Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)."

FENOC had previously relocated the (P-T) limits to a PTLR. The new PTLR includes a change in methodology which was approved via a license amendment dated January 28, 2011. During the review of the new methodology, the U.S. Nuclear Regulatory Commission (NRC) staff reviewed an unapproved version of the revised PTLR. A previous revision of the PTLR using the same methodology was submitted by letter dated April 27, 2011; however, the NRC staff received Revision 1 of the PTLR prior to completing the safety evaluation for Revision 0 of the PTLR. Therefore, the NRC staff's current review addresses only Revision 1 of the PTLR. The NRC staff notes that Revision 0 and Revision 1 to the PTLR use the same methodology.

To complete its review, the NRC staff requests the following information.

Request for Additional Information (RAI) No. 1

Provide the highest reference temperature (RTNDT) of the material in the reactor vessel (RV) closure flange region taking into account the replacement of the DBNPS RV head.

RAI No. 2

Figure 1, "Composite Normal Heatup/Cooldown Limit – Hot Leg "2(A)" Pressure Tap," and Figure 2, "Composite Normal Heatup/Cooldown Limit – Hot Leg "1(B)" Pressure Tap," of the pressure-temperature limits report (Reference 1) each have a note (#7) stating that instrument error is not accounted for in [the pressure-temperature] limits. However, the two figures have different maximum pressures in the "flange notch" region¹ of the curve (540 psig vs. 565 psig) which appears to suggest a different pressure differential between the RV and each hot leg. State whether the pressure differential between the RV and the hot-legs is accounted for in Figures 1 and 2, and provide the values of the pressure differential if applicable.

¹ The "flange notch" region refers to the portion of the P-T limit curve defined by the requirement of 10CFR 50, Appendix G, that the pressure for normal operation may not exceed 20 percent of the preservice hydrostatic test (PSHT) pressure until the temperature exceeds by 120 °F (160 °F if the core is critical) the maximum RTNDT of the material in the RV closure flange region that is highly stressed by bolt preload. 20 percent of the PSHT pressure for DBNPS is 625 psig.

If circumstances result in the need to revise the requested response date, please contact me at (301) 415-3867.

Sincerely,
/RA/

Michael Mahoney, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

DISTRIBUTION:

PUBLIC

LPL3-2 R/F

RidsNrrPMDavis-BesseResource

RidsAcrsAcnw_MailCTR Resource

RidsRgn3MailCenter Resource

RidsNrrDorlLpl3-2 Resource

RidsNrrLASRohrer Resource

RidsOgcRp Resource

RidsNrrDorlDpr Resource

ADAMS Accession No. ML120190038

NRR-088

OFFICE	LPL3-2/PM	LPL3-2/LA	LPL3-2/BC	LPL3-2/PM
NAME	MMahoney	SRohrer	JZimmerman	MMahoney
DATE	1/18/12	1/19/12	1/19/12	1/20/12

OFFICIAL RECORD COPY