



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

September 21, 2013

Mr. Eric A. Larson, Site Vice President
FirstEnergy Nuclear Operating Company
Beaver Valley Power Station
Mail Stop A-BV-SEB1
P.O. Box 4, Route 168
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING END-OF-LIFE MODERATOR
TEMPERATURE COEFFICIENT TESTING (TAC NOS. ME9144 AND ME9145)

Dear Mr. Larson:

By letter dated July 25, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12208A309), as supplemented by letter dated June 1, 2013 (ADAMS Accession No. ML13155A021), FirstEnergy Nuclear Operating Company (FENOC) submitted a proposed amendment to the Beaver Valley Power Station, Units 1 and 2, Technical Specifications (TSs). The proposed amendment would modify TS 3.1.3 to exempt the normally required near-end-of-life Moderator Temperature Coefficient (MTC) measurement from being performed under certain conditions. If these conditions are met, the MTC measurement would be replaced by a calculated value.

The Nuclear Regulatory Commission staff has been reviewing the submittal and has determined that additional information is needed to complete its review. The specific question is found in the enclosed request for additional information (RAI). The question was sent via electronic transmission on September 9, 2013, to Mr. Phil Lashley, of your staff. The draft question was sent to ensure that the question was understandable, the regulatory basis was clear, and to determine if the information was previously docketed. The question was discussed with your staff on September 18, 2013, and it was agreed that FENOC would respond in 30 days from the date of this letter.

Please contact me at 301-415-3100, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "John G. Lamb".

John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
REGARDING REQUEST TO REMOVE THE REQUIREMENT TO PERFORM
NEAR-END-OF-CYCLE MODERATOR TEMPERATURE COEFFICIENT MEASUREMENT
BEAVER VALLEY POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-334 AND 50-412

By letter dated July 25, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12208A309), as supplemented by letter dated June 1, 2013 (ADAMS Accession No. ML13155A021), FirstEnergy Nuclear Operating Company (FENOC, the licensee) submitted a license amendment request that would modify a surveillance requirement, in the plant technical specifications, to conditionally remove the requirement to perform the near-end-of-cycle measurement of the moderator temperature coefficient (MTC) at Beaver Valley Power Station, Units 1 and 2. Provided that the requisite conditions are satisfied, a value of the MTC predicted using the approach prescribed by the previously approved Topical Report WCAP-13749-P-A,¹ "Safety Evaluation Supporting the Conditional Exemption² of the Most Negative [End-of-Life] EOL Moderator Temperature Coefficient Measurement," would be compared to the surveillance requirement limit, in lieu of a measured value. The U.S. Nuclear Regulatory Commission (NRC) staff has determined that the additional information requested below is needed to complete its review.

1. In your application, dated July 25, 2012, the proposed TS change on page 5.6-2 adds WCAP-13749-P-A. WCAP-13749-P-A, specifically the NRC safety evaluation included in the approved version, allows only for the use of the PHOENIX-P/ANC code package. On page 4 of 10 of your application dated July 25, 2012, FENOC proposes to use the PARAGON lattice physics code. Please explain this discrepancy.

1 A non-proprietary version of WCAP-13749-P-A, WCAP-14851-A, with the same title as WCAP-13749-P-A, is available at ADAMS Legacy Accession No. 9704230055. ADAMS Legacy documents are available through the NRC's Public Document Room.

2 Note that WCAP-13749-P-A uses the term "conditional exemption." This is not to be confused with the NRC's terminology for an "exemption" from the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR). To maintain consistency with WCAP-13749-P-A, the term "conditional exemption" is used in this request for additional information, but the use of that terminology here does not imply that the licensee is requesting an exemption from a requirement in 10 CFR.

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Sincerely,
/ra/

John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
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Request for Additional Information

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ADAMS Accession No.: ML13252A258

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