



FirstEnergy Nuclear Operating Company

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L-08-030

10 CFR 50.90

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT:

Beaver Valley Power Station, Unit No. 2
Docket No. 50-412, License No. NPF-73
Supplemental Information in Support of License Amendment Request No. 205
(TAC No. MD4291)

By letter dated February 9, 2007, (L-07-017 Reference 1), FirstEnergy Nuclear Operating Company (FENOC) submitted License Amendment Requests 334 and 205, proposing changes to the Technical Specifications for Beaver Valley Power Station (BVPS) Units 1 and 2. The proposed changes would revise the recirculation spray system pump start signal Technical Specifications in support of modifications to the containment sumps. The License Amendment Requests also request Nuclear Regulatory Commission (NRC) approval of a change to the calculation methodology used to determine aerosol removal coefficients for use in dose consequence analyses. By letters dated August 8, 2007 (L-07-095, Reference 2) and August 23, 2007 (L-07-105, Reference 3), FENOC provided additional information regarding the application in response to a staff request for additional information.

By letter dated September 13, 2007 (L-07-126, Reference 4) FENOC transmitted a summary of the BVPS Unit 1 Equipment Qualification Calculation for the Refueling Water Storage Tank level interlock associated with the Recirculation Spray Pump start License Amendment Requests. The attachment to this letter provides a summary of the same calculation for BVPS Unit 2. The calculation summary was requested by the NRC during a September 2007 phone call.

The information provided in the attachment does not adversely affect the conclusions of the determination of no significant hazards consideration transmitted by Reference 1.

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NRR

The sump modifications for BVPS Units 1 and 2 will be completed during different refueling outages. The Unit 1 Amendment, 280, was implemented on October 15, 2007. The Unit 2 containment sump modifications will be completed during the Spring 2008 refueling outage. Therefore, FENOC requests approval of the proposed Unit 2 amendment by March 28, 2008. Once approved, the amendment will be implemented prior to the first entry into Mode 4 coming out of the Unit 2 Spring 2008 refueling outage.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – FENOC Fleet Licensing, at 330-761-6071.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 25, 2008.

Sincerely,



Peter P. Sena III

Attachment:

Unit 2 Equipment Qualification Calculation Summary
(Refueling Water Storage Tank level interlock for Recirculation Spray Pump start)

References:

1. FENOC Letter L-07-017, License Amendment Requests Nos. 334 and 205, dated February 9, 2007.
2. FENOC Letter L-07-095, Responses to a Request for Additional Information (RAI) dated July 3, 2007 in Support of License Amendment Request Nos. 334 and 205 (TAC Nos. MD4290 MD4291), dated August 8, 2007.
3. FENOC Letter L-07-105, Supplemental Information for License Amendment Request Nos. 334 and 205 (TAC Nos. MD4290 and MD4291), dated August 23, 2007.
4. FENOC Letter L-07-126, Supplemental Information for License Amendment Request Nos. 334 and 205 (TAC Nos. MD4290 and MD4291), dated September 13, 2007.

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c: Mr. S. J. Collins, NRC Region I Administrator
Mr. D. L. Werkheiser, NRC Senior Resident Inspector
Ms. N. S. Morgan, NRR Project Manager
Mr. D. J. Allard, Director BRP/DEP
Mr. L. E. Ryan (BRP/DEP)

Unit 2 Equipment Qualification Calculation Summary
(Refueling Water Storage Tank level interlock for Recirculation Spray Pump start)
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The Equipment Qualification (EQ) calculation has been revised for the Refueling Water Storage Tank level interlock for Recirculation Spray Pump start License Amendment Request.

Accident Temperature Qualification Inside and Outside Containment

The calculation contains the individual EQ equipment evaluations for the revised containment temperature environmental conditions. The calculation addresses equipment qualification in relation to the containment transient temperature condition (the first 24-hours of postulated accident conditions) as well as long-term temperature conditions (post-accident operating time temperature).

Accident analysis temperature results for various Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) cases were generated in support of the License Amendment Request. Figure 1 reflects the new containment EQ temperature profile. This new profile is a composite curve that was established by bounding the accident analysis temperature overall peak and duration results, which were developed primarily from LOCA Case 1L and MSLB Cases 2M, 10M and 16M.

Equipment qualification evaluations were performed for all EQ equipment inside containment using this containment EQ temperature profile. For comparison, the new containment EQ temperature profile, with a peak profile temperature of 355°F, has been plotted against the existing containment EQ temperature profile, which has a peak profile temperature of 345°F. The new calculated maximum accident temperature due to an MSLB is 345.6°F. The previously calculated maximum accident temperature was 343.9°F.

The outside containment EQ temperature profiles are not required to be changed as a result of the Licensing Amendment Request.

Accident Pressure Qualification Inside and Outside Containment

Accident analysis pressure results for various LOCA and MSLB cases were generated in support of the License Amendment Request. The EQ pressure profiles are not required to be changed as a result of the License Amendment request.

Radiation Qualification Inside and Outside Containment

Radiation qualification evaluations were performed by comparing qualification data for EQ equipment inside and outside containment to the revised Total Integrated Dose (TID) as a result of the Licensing Amendment Request. The equipment in the areas

that experienced dose increases remains qualified. It is noted that no area became a harsh environment as result of the dose increase.

Conclusion

Based on the EQ calculation, EQ equipment both inside and outside containment remains qualified for the Refueling Water Storage Tank level interlock for Recirculation Spray Pump Start License Amendment Request. Therefore, it is not necessary to replace or re-qualify any equipment due to changes in the environmental conditions (temperature and radiation) as a result of the License Amendment Request. The qualification of equipment remains in conformance to the requirements of 10 CFR 50.49, and no outliers exist as a result of the License Amendment Request.

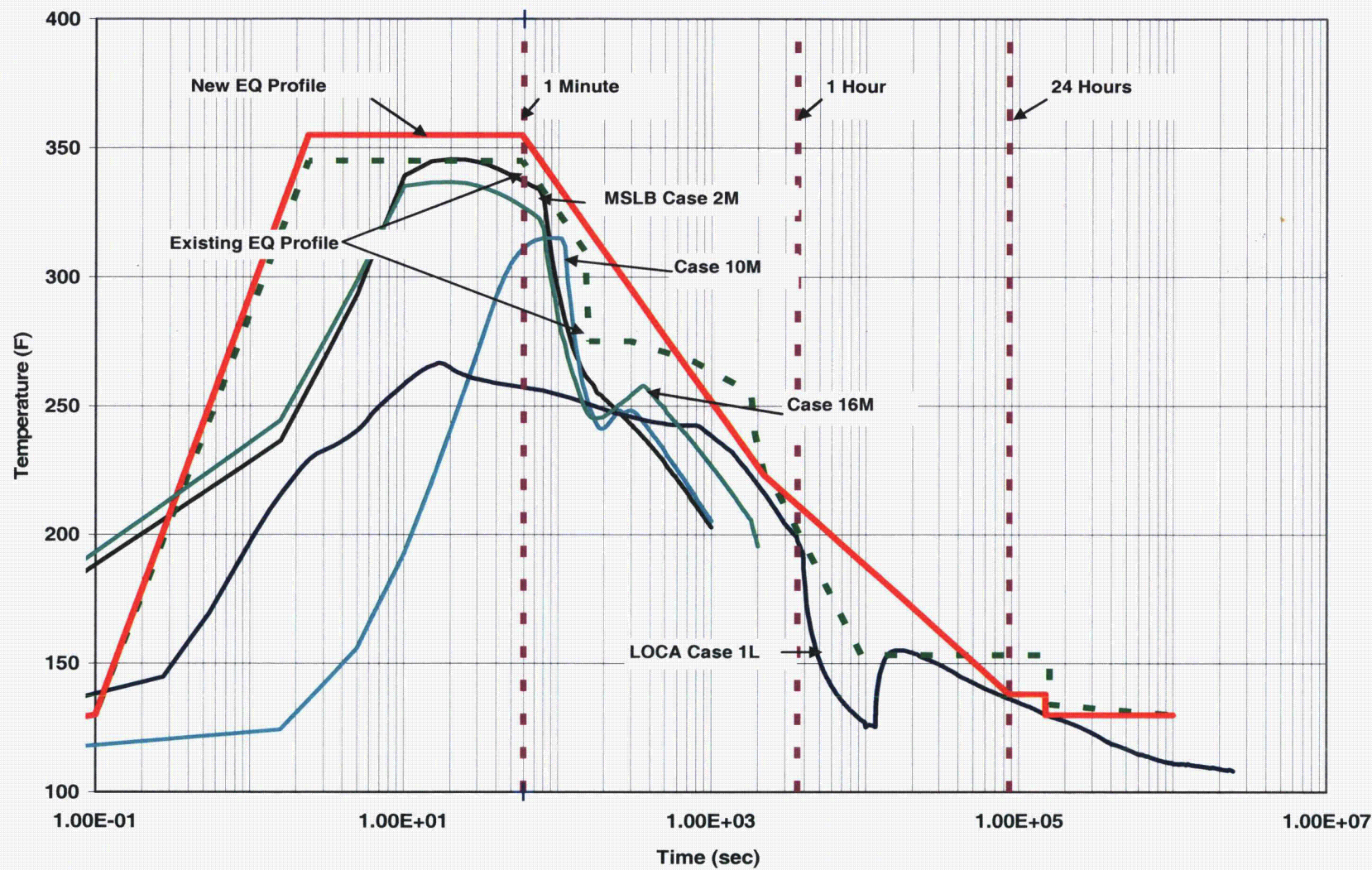


Figure 1
Unit 2 Containment EQ Temperature Profile