

Raymond A. Lieb  
Vice President, Nuclear419-321-7676  
Fax: 419-321-7582May 29, 2014  
L-14-197ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

## SUBJECT:

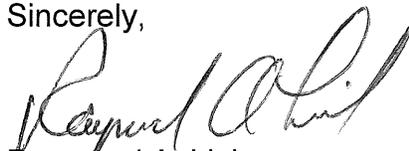
Davis-Besse Nuclear Power Station, Unit No. 1  
Docket No. 50-346, License No. NPF-3  
Response to Request for Additional Information Regarding National Fire Protection Association Standard 805 License Amendment Extension Request (TAC No. MF3759)

By letter dated April 1, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14091A453), FirstEnergy Nuclear Operating Company (FENOC) submitted notification of a change to a regulatory commitment regarding the submission of an application for license amendment to implement 10 CFR 50.48(c) at Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS) by transitioning to National Fire Protection Association Standard (NFPA) 805. The projected date and the associated commitment for submission of the license amendment request (LAR) were changed from July 1, 2014 to December 31, 2015. Consistent with the revised commitment, FENOC also requested continuation of enforcement discretion for certain fire protection issues for DBNPS until an acceptable LAR is submitted.

In order to complete its review of the proposal for enforcement discretion extension, the Nuclear Regulatory Commission (NRC) staff requested additional information in the form of two draft questions provided by electronic mail dated May 22, 2014. During a telephone conference between NRC and FENOC staff on May 23, 2014, the draft questions were finalized with clarification provided by follow-up electronic mail. The FENOC response to the NRC request is attached.

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 - Fleet Licensing, at 330-315-6810.

Sincerely,

  
Raymond A. Lieb

Davis-Besse Nuclear Power Station, Unit No. 1  
L-14-197  
Page 2

Attachment:

Response to NRC Request for Additional Information Dated May 23, 2014

cc: NRC Region III Administrator  
NRC Resident Inspector  
NRC Project Manager  
State of Ohio - Utility Radiological Safety Board

Response to NRC Request for Additional Information Dated May 23, 2014  
Page 1 of 4

By letter dated April 1, 2014 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML14091A453), FirstEnergy Nuclear Operating Company (FENOC) submitted notification of a change to a regulatory commitment regarding the submission of an application for license amendment to implement 10 CFR 50.48(c) at Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS) by transitioning to National Fire Protection Association Standard (NFPA) 805. The projected date and the associated commitment for submission of the license amendment request (LAR) were changed from July 1, 2014 to December 31, 2015. Consistent with the revised commitment, FENOC also requested continuation of enforcement discretion for certain fire protection issues for DBNPS until an acceptable LAR is submitted.

The Nuclear Regulatory Commission (NRC) staff requested additional information in the form of two draft questions provided by electronic mail dated May 22, 2014. During a telephone conference between NRC and FENOC staff on May 23, 2014, the draft questions were finalized with clarification provided by follow-up electronic mail. The final NRC staff questions are presented below in bold type, followed by FENOC's responses.

- 1. In a letter dated April 1, 2014 (Agencywide Documents and Management System (ADAMS) Accession No. ML14091A453) the licensee discussed the installation of a new source of emergency feedwater and the addition of two reactor coolant system inventory makeup pumps, which are expected to provide significant risk improvements in support of the proposed license amendment request (LAR). The licensee further indicated that these modifications support their response to the Mitigation Strategies for Beyond Design Basis External Events Order (EA-12-049). The April 1, 2014 submittal stated that:**

**... details of the modifications will not be available until approval of final design... Because of the significant reduction in plant risk that is to be provided by these design improvements, the above factors should be considered in the NFPA 805 license amendment application.**

**Based on the letter dated February 27, 2013 (ADAMS Accession No. ML13064A243), these modifications will not be completed until after the licensee's proposed submittal date for the LAR on December 31, 2015. Address when the licensee will submit details of these key modifications and how the "new" proposed schedule for completing the design of these modifications supports the submission of a LAR in December 31, 2015 with sufficient technical information, both in scope and depth, for the NRC staff to complete the detailed technical review.**

Response: As stated in the FENOC letter dated April 1, 2014, design modifications intended to reduce fire risk are necessary for the implementation of the NFPA 805 fire

protection program. The emergency feedwater and reactor coolant system inventory makeup pump modifications identified in the DBNPS Overall Integrated Plan in response to NRC Order regarding Mitigation Strategies for Beyond Design Basis External Events (FLEX Order), submitted to the NRC by letter dated February 27, 2013, also support the necessary fire risk reduction. Accordingly, probabilistic risk analysis (PRA) in support of the NFPA 805 transition will include these modifications. Information regarding these modifications will be included in the NFPA 805 LAR to be submitted by December 31, 2015, with sufficient technical information, in both scope and depth, for the NRC staff to complete the detailed technical review. The level of detail included will be consistent with that of other modifications supporting the transition, as delineated in the template used for prior industry applications for NFPA 805 license amendments, as amended.<sup>1</sup>

Although full implementation of these modifications will not be complete at the time of NFPA 805 LAR submission, design activities are currently in progress and will have progressed sufficiently to support the December 31, 2015 LAR submittal date. Additional details regarding project schedule are provided in the response to question two, below.

- 2. Provide a schedule with the major project activities (e.g., milestones, status, completion dates) for the develop (sic) and submission of the LAR for the transition of the fire protection program to National Fire Protection Association Standard NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition. This schedule should include any planned supplements to the LAR, internal events, and fire probabilistic risk analyses to incorporate the risk significant improvements planned (Functional and Operational) for NFPA 805. This "new" schedule should be of sufficient detail to determine that the licensee will be able to submit by December 31, 2015 sufficient technical information, both in scope and depth, for the NRC staff to complete the detailed technical review. Additionally, the schedule should include a description of the remaining work to be performed for those tasks and milestones that are not completed with justification of any milestone completion dates that do not support submittal by December 31, 2015.**

Response: A schedule with the remaining major project activities for the development and submission of the LAR for the DBNPS NFPA 805 fire protection transition is provided below. All tasks and milestones are forecast to be complete in order to support LAR submittal by December 31, 2015. Additionally, because the proposed

---

<sup>1</sup> This template was developed in conjunction with Nuclear Energy Institute (NEI) 04-02, Revision 2, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)," and is periodically amended to reflect operating experience. The NRC issued Regulatory Guide (RG) 1.205, Revision 1, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," endorsing NEI 04-02, with exceptions, in December 2009.

schedule includes time for the design and analytical activities necessary for submission of a complete LAR in December 2015, no supplements to the LAR are anticipated.

Project Task / Milestone	Forecast Complete
Preliminary NFPA 805 Transition Report Complete	June 2014
Details: The DBNPS preliminary NFPA 805 Transition Report is to be developed in accordance with NEI 04-02, Revision 2, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)." The preliminary report will not include conceptual design information.	
FLEX Modifications Required for NFPA 805 – Design Package Issued	March 2015
Details: Design activities for the emergency feedwater and reactor coolant system inventory makeup pump modifications are to be completed. Design packages will include design requirements and supporting calculations necessary to support the NFPA 805 LAR submittal.	
Design information incorporated into NFPA 805 calculations, evaluations and analyses	June 2015
Details: Implementation of the FLEX modifications will result in the installation of new structures, systems and components, requiring the evaluation of at least one new fire compartment. Fire ignition frequency calculations, fire risk evaluations and detailed fire modeling are to be updated to include the new design information.	
Design information incorporated into PRA	September 2015
Details: Internal events analyses, including the fire PRA, are to be re-quantified to incorporate new design information from the proposed FLEX modifications and resulting effects on calculations, evaluations and analyses.	
Draft NFPA 805 Transition Report revised	September 2015
Details: Summary results of supporting calculations, analyses, and evaluations are to be incorporated into draft Transition Report.	
Draft NFPA 805 Transition Report Technical reviews complete	October 2015
Details: Technical review and owner acceptance of draft NFPA 805 Transition Report are to be completed by FENOC personnel, including resolution of comments and proposed changes.	

Project Task / Milestone	Forecast Complete
Draft NFPA 805 Transition Report Internal/External Oversight reviews complete	November 2015
Details: Applicable portions of the draft NFPA 805 Transition Report are to be presented to the Plant Operations Review Committee and the Company Nuclear Review Board; comments incorporated; and recommendations regarding submittal provided to executive management.	
Final NFPA 805 Transition Report issued	November 2015
Details: Following incorporation of any comments resulting from technical and oversight reviews, DBNPS management is to authorize release of final NFPA 805 Transition Report for licensing submittal.	
LAR Submitted to NRC	December 31, 2015
Details: Transmittal correspondence to be developed, reviewed and released by signature authority, resulting in formal LAR submittal for NRC review.	