



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

November 23, 2016

Mr. David B. Hamilton
Site Vice President
FirstEnergy Nuclear Operating Company
Mail Stop A-PY-A290
P.O. Box 97, 10 Center Road
Perry, OH 44081-0097

**SUBJECT: PERRY NUCLEAR POWER PLANT, UNIT NO. 1 - REQUEST FOR
ADDITIONAL INFORMATION RELATED TO LICENSE AMENDMENT
REQUEST FOR UPPER CONTAINMENT POOL GATE INSTALLATION AND
DRAIN DOWN OF THE REACTOR CAVITY PORTION OF THE UPPER
CONTAINMENT POOL (TAC NO. MF7476) (L-16-083)**

Dear Mr. Hamilton:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated March 15, 2016, FirstEnergy Nuclear Operating Company (FENOC) submitted a request to modify the technical specifications to allow installation of the reactor well to steam dryer storage pool gate in the upper containment pool (UCP) in MODES 1, 2, and 3, and draining of the reactor well portion of the UCP in MODE 3, for the Perry Nuclear Power Plant, Unit No. 1.

The 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.

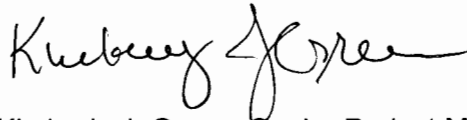
A draft request for additional information (RAI) was transmitted to your staff by email dated November 21, 2016. A clarification call with FENOC was held on November 22, 2016. As a result of the call, the staff revised wording to request number 4. Also, the staff identified one additional request that was discussed during the call. This request is identified as request number 6. During the call, it was agreed that FENOC would provide a response within 30 days from the date of this letter.

D. Hamilton

- 2 -

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) 415-1627.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kimberly J. Green', with a stylized flourish at the end.

Kimberly J. Green, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosure:
Request for Additional Information

cc w/encl: Distribution via ListServ

REQUEST FOR ADDITIONAL INFORMATION
FIRSTENERGY NUCLEAR OPERATING COMPANY
PERRY NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-440

In reviewing the FirstEnergy Nuclear Operating Company's (FENOC) submittal dated March 15, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16075A411), related to license amendment request for installation of the gate in upper containment pool (UCP) in MODES 1, 2, and 3, and draining of the reactor well portion of the UCP in MODE 3, for Perry Nuclear Power Plant, Unit No. 1, the U.S. Nuclear Regulatory Commission (NRC) staff has determined that the following information is needed in order to complete its review:

Title 10 of the *Code of Federal Regulations* (CFR), paragraph 50.34(f), "Additional TMI-related requirements," requires that state-of-the-art human factors principles are used to satisfy all specific regulatory requirements.

NUREG-0800, "Standard Review Plan [SRP] for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," is used by the NRC staff to perform safety evaluations of license applications submitted by applicants pursuant to 10 CFR Part 50. The following chapters in the SRP were used to evaluate the human performance aspect of the license amendment request:

Chapter 18, "Human Factors Engineering," Revision 2, discusses the processes for evaluating operator actions. This chapter also identifies specific areas of review that are needed for successful integration of human characteristics and capabilities into nuclear power plant design.

Chapter 13.5.2.1, "Operating and Emergency Operating Procedures," Revision 2, is used to maintain the applicant's operating procedures that will be used by the operating organization to ensure that the routine operating, off-normal, and emergency activities will be conducted in a safe manner.

1. Describe any new or changed operator actions that are required as a result of the proposed installation of the reactor well to steam dryer storage pool gate in the upper containment pool in MODES 1, 2, and 3.
2. Describe any new or changed operator actions as a result of the proposed creation of the new Special Operations TS, TS 3.10.9, "Suppression Pool Makeup – MODE 3 Upper Containment Pool Drain-Down."
3. Section 3.2.1, "Reactor Well Gate Installation (MODES 1, 2, and 3)," and Section 3.2.2 "Reactor Well Drained in MODE 3," of the enclosure to the license amendment request provide a brief discussion on current emergency operating procedures (EOPs).

Enclosure

Describe any changes to manual operator actions covered by EOPs or abnormal procedures that may occur as a result of this amendment. If so, describe any evaluation of the EOPs for potential modifications.

4. State if the operators will be trained on the proposed license amendment prior to the end of the implementation period.
5. Based on FENOC's response to the above requests 1 and 2, describe the verification and validation activities associated with any required changes.
6. Section 3.2.1 of the enclosure to the license amendment request states that the suppression pool water level can be managed by plant operations during the short duration that the condition will exist. Explain how long the "short duration" will last.

D. Hamilton

- 2 -

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Sincerely,

/RA/

Kimberly J. Green, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-440

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Request for Additional Information

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*via email/memo dated

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DATE	11/22/16	11/22/16	11/21/16	11/23/16	11/23/16

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