

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

February 19, 2019

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

SUBJECT:

PERRY NUCLEAR POWER PLANT, UNIT 1 - REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE DEFERRAL OF ACTIONS RELATED TO BEYOND-DESIGN-BASIS FLOODING HAZARD REEVALUATIONS.

(EPID NO. L-2018-JLD-0176)

Dear Mr. Hamilton:

By letter dated December 7, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18341A046), FirstEnergy Nuclear Operating Company (FENOC, the licensee) requested a deferral of the remaining actions related to the post-Fukushima flood hazard reevaluations at the Perry Nuclear Power Plant, Unit 1 (Perry), in anticipation of the planned permanent shutdown of Perry on May 31, 2021.

In the course of reviewing FENOC's deferral request, the NRC staff has determined that additional information is required in order to complete the review. Therefore, the purpose of this letter is to request additional information (RAI) which supports the NRC's staff development of its deferral response letter.

This RAI was discussed with Mr. Phil Lashley from your staff on February 8, 2019, and a mutually agreeable date for FENOC's response is within 30 days from the date of this letter. Timely responses to RAIs contribute toward an efficient and effective review of the deferral request.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.30(b), "Oath or affirmation," FENOC must execute its response in a signed, original document under oath or affirmation. The licensee's response must be submitted in accordance with 10 CFR 50.4, "Written communications." Information included in this response that FENOC considers security-related, sensitive, or proprietary must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding."

If you have any questions, please contact Juan Uribe, Project Manager, at (301) 415-3809 or via e-mail at Juan.Uribe@nrc.gov.

Sincerely,

Juan Uribe, Project Manager

Beyond-Design-Basis Management Branch

Division of Licensing Projects

Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosure:

Request for Additional Information regarding Perry's Flooding Deferral Request

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION REGARDING THE DEFERRAL OF ACTIONS RELATED TO BEYOND-DESIGN-BASIS FLOODING HAZARD REEVALUATIONS FOR PERRY NUCLEAR POWER PLANT, UNIT 1 (EPID L-2018-JLD-0176)

1. Site response to Local Intense Precipitation

Background:

With regard to plant buildings and permanently installed equipment, the Perry Nuclear Power Plant, Unit 1 (Perry), flood hazard reevaluation report dated March 24, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16084A871), states that the reevaluated local intense precipitation (LIP) event would impact 26 door threshold elevations of the powerblock and exceed 2 door thresholds and 1 louver opening of the Emergency Service Water Pumphouse.

With regard to additional defense-in-depth capabilities, the Perry Mitigating Strategies Assessment dated July 24, 2017 (ADAMS Accession No. ML17205A336), and the deferral letter dated December 7, 2018 (ADAMS Accession No. ML18341A046), state that the FLEX strategies at Perry would potentially be impacted given that the expected water surface elevation would inundate the power block area. The inundation of the power block could potentially pose challenges for the implementation of FLEX strategies due to flooding of the deployment paths and staging areas, in addition to water levels above critical doors that are important for FLEX strategies.

Issue:

The purpose of the focused evaluation is to demonstrate the plant's ability to cope with the reevaluated hazards identified in the Interim Staff Response (ISR) letter, and to identify if further safety enhancements (beyond the sites current protection and mitigation capabilities) are needed. The focused evaluation submittal, which has been requested to be deferred, would have addressed the site response to address LIP exceedances at systems, structures, and components that perform key safety functions of core cooling, spent fuel cooling, and containment integrity. In addition, proposed actions at the site that would allow defense-indepth capabilities, such as FLEX, to address the reevaluated LIP hazard have also been requested to be deferred.

However, the deferral request does not contain a discussion of licensee commitments, or additional defense-in-depth capabilities or temporary actions, if any, that are planned or available at the site to potentially address a reevaluated LIP event as described in the ISR letter issued on July 25, 2016 (ADAMS Accession No. ML16202A350). The NRC staff requests this information to fully inform its determination and response to the deferral request.

Request:

Discuss what additional capabilities, temporary or permanent, are readily available (or planned under the licensee commitment program) at the site that would potentially address the reevaluated LIP hazard until the planned permanent shutdown of Perry on May 31, 2021.

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ADAMS Accession No. ML19035A655

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