



Energy Harbor Nuclear Corp.
Perry Nuclear Power Plant
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April 7, 2021
L-21-002

10 CFR 50.90
10 CFR 50.12

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

SUBJECT:

Perry Nuclear Power Plant, Unit No. 1
Docket No. 50-440, License No. NPF-58
Request to Revise the Methodology Used for Flood Hazard Analysis and to Request
Exemptions to Support Flood Mitigation

Pursuant to 10 CFR 50.90, Energy Harbor Nuclear Corp. is submitting a request for an amendment to Facility Operating License No. NPF-58 for Perry Nuclear Power Plant, Unit No. 1 (PNPP). The proposed amendment would revise the Updated Safety Analysis Report (USAR) to change the methodology used for analysis of flooding hazards and drainage within the local intense precipitation (LIP) domain and reflect the results from the new analysis. Based on the new analysis, a new flood hazard protection scheme is also proposed for PNPP. Energy Harbor Nuclear Corp. has determined that the proposed changes to the PNPP USAR require prior Nuclear Regulatory Commission (NRC) approval. There are no technical specification changes associated with this request.

Enclosure A provides a description and evaluation of the proposed change in methodology and new flood hazard protection scheme, including markups of USAR pages and figures. Because of the volume of information provided, Energy Harbor Nuclear Corp. has elected to submit Enclosure A electronically on a CD-ROM. As required by NRC guidance for electronic submissions to the Commission, Attachment 1 provides a listing of the document components that make up the enclosed CD-ROM 1.

A second CD-ROM is provided that has information identified in accordance with NRC Regulatory Issue Summary (RIS) 2015-17, "Review and Submission of Updates to Final Safety Analysis Reports, Emergency Preparedness Documents, and Fire Protection Documents," removed. Attachment 2 provides a listing of the document components that make up CD-ROM 2.

ADD
NRR

Based on the new flood hazard analysis and new flood hazard protection scheme, Energy Harbor Nuclear Corp. is also submitting two requests for exemptions. Pursuant to 10 CFR 50.12, Energy Harbor Nuclear Corp. is submitting requests for specific exemptions to credit non-safety related protection features, including permanent (passive) and temporary (deployable), as flood barriers (Enclosure B) and to credit the plant storm drain system (Enclosure C) in mitigation of flood levels during a LIP event. Enclosures B and C are also being submitted electronically on the enclosed CD-ROMs.

Energy Harbor Nuclear Corp. proposes this license amendment and associated exemptions as part of a reconstitution effort for the design basis of the original probable maximum flood event (small stream flood) and LIP domain analyses. Therefore, coordination of the review and approval of the three requests is needed to support implementation of the reconstituted design basis.

Approval of the proposed amendment, including the proposed exemptions, is requested by April 9, 2022. Once approved, the amendment shall be implemented within 120 days.

There are no regulatory commitments contained in this submittal. If there are any questions, or if additional information is required, please contact Mr. Phil H. Lashley, Manager – Fleet Licensing, at 330-696-7208.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 7, 2021.

Sincerely,



Rod L. Penfield

Attachments:

1. List of Document Components on CD-ROM 1
2. List of Document Components on CD-ROM 2 (Information Identified Per RIS 2015-17 Removed)

Enclosures:

- A. Evaluation of Proposed Change
- B. Request for Exemption No. 1
- C. Request for Exemption No. 2

cc: NRC Region III Administrator (CD-ROM 1 only)
NRC Resident Inspector (CD-ROM 1 only)
NRR Project Manager (CD-ROM 1 only)
Executive Director, Ohio Emergency Management Agency,
State of Ohio (NRC Liaison) (CD-ROM 2 only)
Utility Radiological Review Board (CD-ROM 2 only)

Attachment 1
L-21-002

List of Document Components on CD-ROM 1
Page 1 of 1

| <u>File Name</u> | <u>Size</u> |
|---|-------------|
| 001 Enclosure A Evaluation of Proposed Change.pdf | 4,847KB |
| 002 Enclosure A Evaluation Attachment 1.pdf | 1,825KB |
| 003 Enclosure A Evaluation Attachment 2 Part 1 of 2.pdf | 79,611KB |
| 004 Enclosure A Evaluation Attachment 2 Part 2 of 2.pdf | 45,330KB |
| 005 Enclosure A Evaluation Attachment 3.pdf | 1,542KB |
| 006 Enclosure A Evaluation Attachment 4.pdf | 83,326KB |
| 007 Enclosure A Evaluation Attachment 5.pdf | 68,682KB |
| 008 Enclosure A Evaluation Attachment 6.pdf | 11,642KB |
| 009 Enclosure B Exemption Request No. 1.pdf | 2,599KB |
| 010 Enclosure C Exemption Request No. 2.pdf | 2,422KB |

Attachment 2
L-21-002

List of Document Components on CD-ROM 2
(Information Identified Per RIS 2015-17 Removed)
Page 1 of 1

| <u>File Name</u> | <u>Size</u> |
|---|-------------|
| 001 Enclosure A Evaluation of Proposed Change.pdf | 4,847KB |
| 002 Enclosure A Evaluation Attachment 1.pdf | 1,825KB |
| 003 Enclosure A Evaluation Attachment 2 Part 1 of 2.pdf | 48,055KB |
| 004 Enclosure A Evaluation Attachment 2 Part 2 of 2.pdf | 21,326KB |
| 005 Enclosure A Evaluation Attachment 3.pdf | 1,542KB |
| 006 Enclosure A Evaluation Attachment 4.pdf | 83,326KB |
| 007 Enclosure A Evaluation Attachment 5.pdf | 68,682KB |
| 008 Enclosure A Evaluation Attachment 6.pdf | 11,642KB |
| 009 Enclosure B Exemption Request No. 1.pdf | 2,599KB |
| 010 Enclosure C Exemption Request No. 2.pdf | 2,422KB |