



Perry Nuclear Power Plant

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L-25-017
January 30, 2025

10 CFR 54

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
License Renewal Application for the Perry Nuclear Power Plant – Responses to Request for Confirmatory Information (Set 3)

REFERENCES:

1. Letter L-23-146, from Rod L. Penfield to the Nuclear Regulatory Commission, dated July 3, 2023, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0 (ADAMS Accession No. ML23184A081)
2. Nuclear Regulatory Commission issuance of Conforming License Amendment 203 to Facility Operating License NPF-58 (Enclosure 1) for the license transfer for the Perry Nuclear Power Plant (ADAMS Accession Nos. ML24057A075 and ML24057A077)
3. Letter L-24-110, from Rod L. Penfield to the Nuclear Regulatory Commission, dated July 3, 2024, submitting 10 CFR 54.21(b) Annual Amendment to the Perry Nuclear Power Plant License Renewal Application (ADAMS Accession No. ML24185A092)
4. Letter from Lauren K. Gibson to Rod L. Penfield, Perry Nuclear Power Plant, Unit No. 1 dated September 25, 2023 – Aging Management Audit Plan Regarding the License Renewal Application Review (ADAMS Accession No. ML23261B019)
5. Letter L-24-189, from Rod L. Penfield to the Nuclear Regulatory Commission, dated August 7, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 1 (Non- Proprietary) (ADAMS Accession No. ML24220A270)

6. Letter L-24-020, from Rod L. Penfield to the Nuclear Regulatory Commission, dated June 27, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 2 (ADAMS Accession No. ML24180A010)
7. Letter L-24-108, from Rod L. Penfield to the Nuclear Regulatory Commission, dated July 24, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 3 (ADAMS Accession No. ML24206A150)
8. Letter L-24-200, from Rod L. Penfield to the Nuclear Regulatory Commission, dated September 5, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 4 Revision 1 (ADAMS Accession No. ML24249A123)
9. Letter L-24-179, from Rod L. Penfield to the Nuclear Regulatory Commission, dated October 21, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 5 (ADAMS Accession No. ML24295A352)
10. Letter L-24-243 from Rod L. Penfield to the Nuclear Regulatory Commission, dated November 7, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 6 (ADAMS Accession No. ML24312A368)
11. Letter L-24-256 from Rod L. Penfield to the Nuclear Regulatory Commission, dated December 19, 2024, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 7 (ADAMS Accession No. ML24354A265)
12. Letter L-25-013 from Rod L. Penfield to the Nuclear Regulatory Commission, dated January 27, 2025, submitting the Perry Nuclear Power Plant License Renewal Application Revision 0, Supplement 8 (ADAMS Accession No. ML25027A327)
13. Letter L-24-207, from Rod L. Penfield to the Nuclear Regulatory Commission, dated September 16, 2024, submitting the License Renewal Application for the Perry Nuclear Power Plant – Response to Request for Additional Information – Set 1 (ADAMS Accession No. ML24260A266)
14. Letter L-24-208, from Rod L. Penfield to the Nuclear Regulatory Commission, dated October 2, 2024, submitting the License Renewal Application for the Perry Nuclear Power Plant – Response to Request for Additional Information – Set 2 (ADAMS Accession No. ML24276A083)
15. Letter L-24-209, from Rod L. Penfield to the Nuclear Regulatory Commission, dated November 19, 2024, submitting the License Renewal Application for the Perry Nuclear Power Plant – Response to Request for Additional Information – Set 3 (ADAMS Accession No. ML24324A185)
16. Letter L-24-226, from Rod L. Penfield to the Nuclear Regulatory Commission, dated October 31, 2024, submitting the License Renewal Application for the Perry Nuclear Power Plant – Response to Requests for Confirmatory Information – Set 1 (ADAMS Accession No. ML24305A134)
17. Letter L-24-257, from Rod L. Penfield to the Nuclear Regulatory Commission, dated December 4, 2024, submitting the License Renewal Application for the Perry Nuclear Power Plant Revision 0 – Response to Requests for Confirmatory Information – Set 2 (ADAMS Accession No. ML24339A066)
18. NRC Email from Vaughn Thomas to Rod Penfield – dated January 10, 2025 - Perry LRA – Requests for Confirmatory Information - Set 3 (ADAMS Accession No. ML25010A123)

On July 3, 2023, Energy Harbor Nuclear Corp. submitted a license renewal application (LRA) for the Facility Operating License for the Perry Nuclear Power Plant, Unit No. 1 (PNPP) (Reference 1). Subsequent to the submittal of the PNPP LRA, the PNPP Facility Operating License has been transferred to Vistra Operations Company LLC (VistraOps) per conforming license Amendment 203 and the license transfer transaction was closed on March 1, 2024 (Reference 2). The license transfer changes impacting the PNPP LRA are documented in the annual amendment required by 10 CFR 54.21(b), submitted on July 3, 2024 (Reference 3).

During the Nuclear Regulatory Commission (NRC) staff's aging management audit of the PNPP LRA (Reference 4), the PNPP Staff agreed to supplement the LRA with clarifying information which has led to several LRA supplements (References 5 through 12).

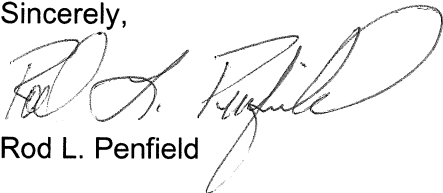
In addition, as a result of the NRC's review and audit of the PNPP LRA, the NRC Staff has submitted and the PNPP Staff responded to three sets of Requests for Additional Information (RAIs) (References 13 through 15) and two sets of Requests for Confirmatory Information (RCIs) (References 16 and 17).

The attachment to this letter provides the response to the RCI (Set 3) submitted by the NRC Staff on January 10, 2025 (Reference 18).

The regulatory commitments identified in Appendix A, Table A.3 of the PNPP LRA are not impacted by the attached RCI response. If there are any questions or if additional information is required, please contact Mr. Mark Bensi, PNPP License Renewal Manager at (440) 280-6179 or via email at Mark.Bensi@vistracorp.com.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 30, 2025.

Sincerely,



Rod L. Penfield

Attachment:

PNPP Response to RCI NCSG-RCI-10460-R1

cc: NRC Region III Administrator
NRC Resident Inspector
NRR Project Manager
Executive Director, Ohio Emergency Management Agency, State of Ohio (NRC Liaison)
Utility Radiological Safety Board

NCSG RCI-10460-R1

Regulatory Basis

Part 54 of Title 10 of the *Code of Federal Regulations*, "Requirements for renewal of operating licenses for nuclear power plants," is designed to elicit application information that will enable the NRC staff to perform an adequate safety review and the Commission to make the necessary findings. Reliability of application information is important and advanced by requirements that license applications be submitted in writing under oath or affirmation and that information provided to the NRC by a license renewal applicant or required to be maintained by NRC regulations be complete and accurate in all material respects. Information that must be submitted in writing under oath or affirmation includes the technical information required under 10 CFR 54.21(a) related to assessment of the aging effects on structures, systems, and components subject to an aging management review. Thus, both the general submission requirements for license renewal applications and the specific technical application information requirements require that submission of information material to NRC's safety findings (see 10 CFR 54.29 standards for issuance of a renewed license) be submitted by an applicant as part of the application.

Background

As supplemented by letter dated July 24, 2024 (ML24206A150), License Renewal Application (LRA) Table 3.5.2-4 identifies no aging effects/mechanisms, and no aging management programs for gypsum board drywall exposed externally to indoor uncontrolled air. The AMR item cites generic note H ("Aging effect not in NUREG-1801 for this component, material, and environment combination") and plant-specific note 532 which states, "No mechanism for degradation of drywall was identified due to aging."

Based on Table 6-2 of EPRI 3002013084, "Long-Term Operations: Subsequent License Renewal Aging Effects for Structures and Structural Components (Structural Tools)," the applicable aging effects for fire stops include (1) loss of material due to abrasion, (2) cracking/delamination due to vibration, movement, and shrinkage, (3) change in materials due to gamma irradiation exposure, and (4) separation due to vibration, movement, and shrinkage.

In the response to RAI-10337-R1 in the letter dated November 19, 2024 (ML24324A185), the applicant provided plant-specific information to support their position that loss of material, cracking/delamination, change in material properties, and separation are not applicable to the gypsum board drywall utilized at PNPP. The staff notes that the response did not address plant-specific operating experience related to gypsum board drywall.

Request

Please confirm there is no plant-specific operating experience related to gypsum board drywall due to age-related degradation.

PNPP Response:

Request

Please confirm there is no plant-specific operating experience related to gypsum board drywall due to age-related degradation.

Vistra confirms the above statement is accurate. The operating experience review performed in support of the development of the PNPP license renewal application found no plant-specific operating experience related to gypsum board/drywall degradation due to age-related mechanisms that would impact systems, structure, or components within the scope of license renewal. In addition, a supplemental review of the PNPP Corrective Action Program database for the last ten years using the keywords of “gypsum” and “drywall” did not identify evidence of age-related degradation of gypsum board assemblies.