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Mandy K. Halter Director, Nuclear Licensing

10 CFR 50.82

January 9, 2019

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

SUBJECT: Clarification of Post-Shutdown Decommissioning Activities Report Pilgrim Nuclear Power Station

> Docket No. 50-293 Renewed License No. DPR-35

## LETTER NUMBER: 2.19.002

- REFERENCES: 1. Letter, Entergy Nuclear Operations, Inc. to USNRC, "Pilgrim Nuclear Power Station Post-Shutdown Decommissioning Activities Report," 2.18.070, dated November 16, 2018 (ML18320A034)
  - Letter, Entergy Nuclear Operations, Inc. to USNRC, "Decommissioning Funding Status Report per 10 CFR §50.75(f)(1) and 10 CFR 50.82(a)(8)(v) -- Entergy Nuclear Operations, Inc.," CNRO-2018-00012, dated March 29, 2018 (ML18088B369)
  - 3. Letter, Entergy Nuclear Operations, Inc. to USNRC, "Update to Spent Fuel Management Plan Pursuant to 10 CFR 50.54(bb)," 2.18.071, dated November 16, 2018 (ML18320A036)
  - Letter, Entergy Nuclear Operations, Inc. to USNRC, "Request for Exemption from 10 CFR 50.82(a)(8)(i)(A)," 2.18.069, dated November 16, 2018 (ML18320A037)

Dear Sir or Madam:

In Reference 1, Entergy Nuclear Operations, Inc. (Entergy), on behalf of itself and Entergy Nuclear Generation Company (ENGC), submitted a Post-Shutdown Decommissioning Activities Report (PSDAR) and Site-Specific Decommissioning Cost Estimate (DCE), provided as Attachment 1 to the PSDAR, for Pilgrim Nuclear Power Station (PNPS).

The purpose of this letter is to provide clarifying information on the PSDAR and DCE.

## License Termination and Spent Fuel Management Expenses

Table 3.2a of the PNPS DCE identifies the estimated annual expenditures for license termination activities. For the year 2018, the license termination expenses are estimated to be \$19.142 million. Of that amount, approximately \$10.895 million is for license termination planning. The remaining license termination expenses for 2018 are related to the evaluation of

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alternatives to the SAFSTOR decommissioning method (Activity 0a.2.9 in Appendix C of the DCE).

License termination planning costs are a subset of the license termination costs. Consistent with Title 10 Code of Federal Regulations (CFR) 50.82(a)(8)(ii), the total estimated cost for license termination planning activities is \$18.496 million, which corresponds to 3 percent of the 10 CFR 50.75(c) minimum amount for PNPS (\$616.56 million), as reported in Reference 2. The decommissioning planning period for PNPS is approximately 12 months in length, and the costs are distributed over the years 2018 (approximately 7 months) and 2019 (approximately 5 months). This amount is reflected in Appendix C of the DCE as Activity 0a.2.8. As noted above, the estimated license termination planning cost for 2018 is approximately \$10.895 million, and the balance of license termination planning expenses (\$7.601 million) would be incurred in 2019. A summary of the breakdown of total license termination and license termination planning costs for 2018 and 2019 is provided below.

|       | Planning (3%) | SAFSTOR Alternative<br>Evaluation | Total    |
|-------|---------------|-----------------------------------|----------|
| 2018  | \$10.895      | \$8.247                           | \$19.142 |
| 2019  | \$7.601       | \$5.753                           | \$13.354 |
| Total | \$18.496      | \$14.000                          | \$32.496 |

## License Termination Costs for 2018 and 2019 (\$ Millions)

To date, Entergy has not taken any distribution from the nuclear decommissioning trust (NDT) to reimburse for any of the expenses related to license termination or license termination planning activities. Expenses identified in the DCE are not necessarily indicative of Entergy's intention to seek reimbursement from the NDT. 10 CFR 50.82(a)(8)(i) governs what the NDT may be used for, and 10 CFR 50.82(a)(8)(ii) provides the restrictions on accessing the NDT. Column 6 of Table 5 (Annual Cash Flow Analysis) of Reference 3 shows that the first disbursement from the NDT is expected to occur in 2019, which corresponds with the scheduled permanent cessation of operations and permanent removal of fuel from the reactor vessel.

Table 3.2b of the DCE identifies the estimated annual expenditures for spent fuel management activities and includes \$16.133 million for 2018. To date, Entergy has not taken any distribution from the NDT to reimburse for any of the expenses related to spent fuel management or spent fuel management planning activities. Entergy understands that an exemption from 10 CFR 50.82(a)(8)(i)(A) must be granted prior to reimbursing any spent fuel management-related expenses from the NDT. A request for exemption was submitted as Reference 4.

## Independent Spent Fuel Storage Installation (ISFSI) Decommissioning Costs

The total cost for decommissioning the PNPS ISFSI is reported in Appendix D of the DCE (\$9.421 million). The cost is reported in Appendix C of the DCE as a license termination expense (Activity 4b.2.5). In SAFSTOR, it is assumed that the ISFSI is decommissioned along with the plant. As such, the \$9.421 million is included in Table 3.2a of the DCE, in years 2076-2078, as follows:

| 2076  | \$2.652 million |
|-------|-----------------|
| 2077  | \$4.050 million |
| 2078  | \$2.719 million |
| Total | \$9.421 million |

This letter contains no new regulatory commitments.

Should you have any questions concerning this letter or require additional information, please contact Mr. Peter J. Miner at (508) 830-7127.

Sincerely,

Mandy KHalter

MKH/plc

CC:

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NRC Resident Inspector Pilgrim Nuclear Power Station