NRR-DRMAPEm Resource

From: Wall, Scott

Sent: Friday, July 26, 2019 2:33 PM

To: Couture III, Philip

Cc: Halter, Mandy; Miner, Peter; Manrique, Ricardo

Subject: Final RAI - Pilgrim License Transfer and Holtec DTF Exemption Requests (EPID: L-2018-

LL0-0003 and L-2018-LLE-0020)

Dear Mr. Couture,

By application dated November 16, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18320A031), as supplemented by letters dated November 16, 2018, and April 17, 2019 (ADAMS Accession Nos. ML18320A040 and ML19109A177, respectively), Entergy Nuclear Operations, Inc. (ENOI), on behalf of itself and Entergy Nuclear Generation Company (ENGC) (to be known as Holtec Pilgrim, LLC), Holtec International (Holtec), and Holtec Decommissioning International, LLC (HDI), (hereinafter referred to as "Applicants"), requested that the U.S. Nuclear Regulatory Commission (NRC) consent to the following actions:

- (1) the indirect transfer of control of the Renewed Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station (Pilgrim), as well as the general license for the Pilgrim Independent Spent Fuel Storage Installation (ISFSI), to Holtec, and
- (2) the direct transfer of ENOI's operating authority to HDI.

The Applicants also requested that the NRC approve a conforming administrative amendment to the facility licenses, to reflect the proposed direct transfer of the licenses from ENOI to HDI and the planned name change for ENGC, from ENGC to Holtec Pilgrim, LLC (Holtec Pilgrim).

Additionally, in Enclosure 2 of the license transfer application dated November 16, 2018, HDI requested exemption from 10 CFR 50.82(a)(8)(i)(A). The exemption from 10 CFR 50.82(a)(8)(i)(A) would permit HDI to make withdrawals from the Pilgrim Decommissioning Trust Fund (DTF) for spent fuel management and site restoration activities in accordance with the site-specific Pilgrim Decommissioning Cost Estimate (DCE).

The U.S. Nuclear Regulatory Commission staff has reviewed the submittals and determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). During a telephone call on July 26, 2019, the Entergy staff indicated that a response to the RAI would be provided within 10 days.

If you have questions, please contact me at 301-415-2855 or via e-mail at Scott.Wall@nrc.gov.

Scott P. Wall, LSS BB, BSP

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Docket Nos. 50-293 and 72-1044

Enclosure:

Request for Additional Information

cc: Listserv

RAI-PFPB-1

REQUEST FOR ADDITIONAL INFORMATION DIRECT AND INDIRECT TRANSFER OF LICENSE AND CONFORMING LICENSE AMENDMENT AND REQUEST FOR EXEMPTION FROM 10 CFR 50.82(a)(8)(i)(A) ENTERGY NUCLEAR OPERATIONS, INC. PILGRIM NUCLEAR POWER STATION DOCKET NOS. 50-293 AND 72-1044

By application dated November 16, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18320A031), as supplemented by letters dated November 16, 2018, and April 17, 2019 (ADAMS Accession Nos. ML18320A040 and ML19109A177, respectively), Entergy Nuclear Operations, Inc. (ENOI), on behalf of itself and Entergy Nuclear Generation Company (ENGC) (to be known as Holtec Pilgrim, LLC), Holtec International (Holtec), and Holtec Decommissioning International, LLC (HDI), (hereinafter referred to as "Applicants"), requested that the U.S. Nuclear Regulatory Commission (NRC) consent to the following actions:

- (1) the indirect transfer of control of the Renewed Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station (Pilgrim), as well as the general license for the Pilgrim Independent Spent Fuel Storage Installation (ISFSI), to Holtec, and
- (2) the direct transfer of ENOI's operating authority to HDI.

The Applicants also requested that the NRC approve a conforming administrative amendment to the facility licenses, to reflect the proposed direct transfer of the licenses from ENOI to HDI and the planned name change for ENGC, from ENGC to Holtec Pilgrim, LLC (Holtec Pilgrim).

In support of its license transfer application, HDI submitted a "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Pilgrim Nuclear Power Station" (revised PSDAR) on November 16, 2018 (ADAMS Accession No. ML18320A040), to notify the NRC of changes to accelerate the schedule for the prompt decommissioning (i.e., DECON) of Pilgrim and unrestricted release of all portions of the site (excluding the ISFSI) within 8 years after the license transfer. On December 17, 2018 (ADAMS Accession No. ML18333A240), the NRC notified ENOI that the staff is treating the revised PSDAR submittal, dated November 16, 2018, as a supplement to the Pilgrim license transfer application, also dated November 16, 2018, until such time as the NRC makes a regulatory decision on the Pilgrim license transfer application. The NRC staff is reviewing the revised PSDAR only to determine whether Holtec Pilgrim and HDI are financially and technically qualified to hold the license for Pilgrim and the general license for the Pilgrim ISFSI, as described in the application, and to engage in the proposed maintenance and decommissioning activities associated with the Pilgrim site.

Additionally, in Enclosure 2 of the license transfer application dated November 16, 2018, HDI requested an exemption from 10 CFR 50.82(a)(8)(i)(A). The exemption from 10 CFR 50.82(a)(8)(i)(A) would permit HDI to make withdrawals from the Pilgrim Decommissioning Trust Fund (DTF) for spent fuel management and site

restoration activities in accordance with the site-specific Pilgrim Decommissioning Cost Estimate (DCE), included with the revised PSDAR.

The U.S. Nuclear Regulatory Commission staff reviewed the submittal and determined that the following additional information is needed to complete its review.

RAI-PFPB-01

Applicable Regulation and Guidance

In Title 10 of the Code of Federal Regulations (10 CFR) Part 50.75, "Reporting and recordkeeping for decommissioning planning," the NRC establishes requirements for indicating to the NRC how a licensee will provide reasonable assurance that funds will be available for the decommissioning process. In addition, 10 CFR 50.75(b) requires that each power reactor applicant for an operating license submit a decommissioning report, as required by 10 CFR 50.33(k).

In 10 CFR 50.75(b)(1), the NRC states, in part, that:

For an applicant for ... an operating license under part 50, the report must contain a certification that financial assurance for decommissioning will be ... provided in an amount which may be more, but not less, than the amount stated in the table in paragraph (c)(1) of this section ...

In 10 CFR 50.75(b)(3), the NRC indicates that the amount determined by 10 CFR 50.75(c) must be covered one or more of the methods described in Section 50.75(e).

Further, 10 CFR 50.75(b)(4) states, in part:

The amount stated in the applicant's... certification may be based on a cost estimate for decommissioning the facility....

In 10 CFR 50.75(c), the NRC provides the method acceptable to the agency for determining the minimum amount required to demonstrate reasonable assurance of funds for decommissioning by reactor type and power level; with adjustment factor.

In 10 CFR 50.75(e), the NRC includes the methods acceptable to the agency for providing decommissioning financial assurance.

Finally, 10 CFR 50.75(h) provides additional requirements on the management of decommissioning trust funds (DTFs).

10 CFR 50.33(f) states, in part:

Except for an electric utility applicant for a license to operate a utilization facility of the type described in § 50.21(b) or § 50.22, [each application shall state] information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought.

The definition of "decommission" in 10 CFR 50.2 reads as follows:

to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.

The regulation in 10 CFR 50.82(a)(8)(i)(A) restricts the use of DTF withdrawals to expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2. This definition in 10 CFR 50.2 does not include activities associated with spent fuel management and site restoration activities.

Regulatory Guide (RG) 1.202, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors" (ADAMS Accession No. ML050230008), states, in part, that:

[T]o meet the requirements of 10 CFR 50.75(c), a power reactor licensee may submit a certification based on a site-specific cost estimate, which may be more (but not less) than the amount specified in 10 CFR 50.75(b)(1)....

In addition, RG 1.202, states:

... a site-specific estimate may be submitted, at the discretion of the licensee, when a funding level differs from that calculated in the formula in 10 CFR 50.75(c). The site-specific cost estimate must clearly identify and provide the basis for the funding level if it differs from the formula.

Further RG 1.202, indicates that the licensee should provide a comparison of the estimated decommissioning cost with the minimum financial assurance funding requirement of 10 CFR 50.75(c).

RG 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors" (ADAMS Accession No. ML112160012), states, in part, that:

At its discretion, a power reactor licensee may submit a certification based either on the formulas provided in 10 CFR 50.75(c)(1) and (2) or, when a higher funding level is desired, on a site-specific cost estimate that is equal to or greater than that calculated in the formulas in 10 CFR 50.75(c)(1) and (2). A site-specific cost estimate may include non-NRC-required costs, but such costs should be identified. If such a combined submittal is used, licensees should ensure that the NRC-required cost estimate for decommissioning costs, as defined in 10 CFR 50.2, is equal to or greater than the amount stated in the formulas in 10 CFR 50.75(c)(1) and (2). For certification amounts below the amount stated in the formulas in 10 CFR 50.75(c)(1) and (2), licensees must submit an exemption request....

The NRC staff also applied guidance in NUREG-1577, Revision 1, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," issued February 1999 (ADAMS Accession No. ML013330264), to evaluate the financial qualifications of applicants to carry out the activities for which the permit or license is sought.

NUREG-1713, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors," issued December 2004 (ADAMS Accession No. ML043510113), to evaluate decommissioning cost estimates provided by power reactor licensees. NUREG-1713, states in part, that:

The [NRC] reviewer should compare the [site-specific DCE] with the minimum decommissioning financial assurance requirement amount derived per the algorithm discussed in [10 CFR 50.75(c)]. If the [site-specific DCE] is less than the amount derived from the algorithm in 10 CFR 50.75(c) and adequate justification is not provided, [the NRC] will inform the licensee in writing of additional information needed to resolve the deficiency.

Issue

By letter dated March 28, 2019 (ADAMS Accession No. ML19087A318), ENOI submitted its annual report on the status of decommissioning funding for Pilgrim. The report states that the minimum amount (December 2018 dollars) required to demonstrate reasonable assurance of funds for decommissioning, as required by 10 CFR 50.75(c), is \$633,267,558.

The HDI analysis in the November 16, 2018, revised PSDAR, projects the total radiological decommissioning cost of Pilgrim to be approximately \$592,553,000 in 2018 dollars. The request for exemption from 10 CFR 50.82(a)(8)(i)(A) relies on the estimated costs for radiological decommissioning, including ISFSI decommissioning costs, as well as for spent fuel management and site restoration provided in the revised PSDAR.

Request for Additional Information

1. As identified in the NRC regulations and guidance documents described above, the estimated radiological decommissioning costs, consistent with the definition in 10 CFR 50.2, may be more, but not less, than the amount specified in 10 CFR 50.75(c).

In the November 16, 2018, license transfer application, the Applicants state the following:

The required [DTF] value at closing exceeds the minimum financial assurance required by 10 CFR 50.75(b) and the site-specific estimate of the radiological decommissioning cost, providing sufficient confidence that decommissioning can be achieved without the need for additional financial assurance. Further, a cash-flow analysis based on the site-specific estimate demonstrates that the funds in the [DTF] at closing will be sufficient to fund all radiological decommissioning costs, spent fuel management costs, and site restoration costs through the expected license termination date, and thus demonstrates Holtec Pilgrim's financial qualifications.

However, there is no comparison in the application between the estimated radiological decommissioning costs of \$592,553,000 and the 10 CFR 50.75(c) minimum amount of \$633,267,558, as reported by ENOI in its March 28, 2019, decommissioning funding status report.

Based on the requirements and guidance cited above, please justify using a total radiological decommissioning cost estimate value, consistent with the definition in 10 CFR 50.2, that is less than the minimum amount calculated using 10 CFR 50.75(c) in support of the license transfer application and the exemption request.

2. Using the 10 CFR 50.75(c) minimum amount for radiological decommissioning costs, please provide an updated, revised decommissioning cash flow analysis to support the license transfer application and exemption request.

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