# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kristine L. Svinicki, Chairman Jeff Baran Annie Caputo David A. Wright Christopher T. Hanson

In the Matter of

ENTERGY NUCLEAR OPERATIONS, INC., ENTERGY NUCLEAR GENERATION COMPANY, HOLTEC INTERNATIONAL, AND HOLTEC DECOMMISSIONING INTERNATIONAL, LLC Docket Nos. 50-293-LT 72-1044-LT

(Pilgrim Nuclear Power Station)

# CLI-20-12

# MEMORANDUM AND ORDER

This proceeding concerns a license transfer application involving the renewed facility operating license for the Pilgrim Nuclear Power Station and the general license for the associated Independent Spent Fuel Storage Facility (ISFSI) (together, the licenses). Entergy Nuclear Operations, Inc. (ENOI), on behalf of itself and Entergy Nuclear Generation Company (ENGC), Holtec International, and Holtec Decommissioning International, LLC (HDI) (collectively, the Applicants), requested NRC consent to the indirect transfer of control of the licenses to Holtec International and HDI and to the direct transfer of ENOI's operating authority to HDI.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See Pilgrim Nuclear Power Station; Consideration of Approval of Transfer of License and Conforming Amendment, 84 Fed. Reg. 816 (Jan. 31, 2019) (Hearing Opportunity Notice). We

After completing its review, the NRC Staff issued (1) an order approving the license transfer; (2) a related regulatory exemption that had been requested in the license transfer application; and (3) a conforming license amendment to reflect the transfer that included the deletion of certain conditions unique to ENOI and an associated name change.<sup>2</sup> NRC regulations allow the Staff to issue its approval or denial of a license transfer application, consistent with its findings in its Safety Evaluation Report (SER), during a pending adjudicatory proceeding.<sup>3</sup> But the application "will lack the agency's final approval until and unless the Commission concludes the adjudication" in the Applicants' favor.<sup>4</sup> The Staff's order and related issuances therefore remain subject to our authority to modify, condition, or rescind them, based on the results of this proceeding.

refer to ENGC and ENOI together as "Entergy." We refer to HDI and Holtec Pilgrim, LLC (the name of the owner licensee following the transfer) together as "Holtec."

<sup>&</sup>lt;sup>2</sup> See Order Approving Direct and Indirect Transfer of License and Conforming Amendment (Aug. 22, 2019) (ADAMS accession no. ML19170A265) (Order Approving Transfers); Exemption (Aug. 22, 2019) (ML19192A086) (Exemption); Amendment No. 249 to DPR-35, attached as Encl. 1 to Letter from Scott P. Wall, NRC, to Pierre Paul Oneid, Holtec International, and Pamela B. Cowan, HDI (Aug. 27, 2019) (ML19235A050) (License Amendment).

<sup>&</sup>lt;sup>3</sup> 10 C.F.R. § 2.1316(a); *see also* Atomic Energy Act of 1954, as amended (AEA) § 189a., 42 U.S.C. § 2239(a)(2)(A) (permitting issuance of license amendment on an immediately effective basis, upon a determination that the amendment involves no significant hazards consideration, notwithstanding the pendency of a hearing request).

<sup>&</sup>lt;sup>4</sup> See CLI-19-11, 90 NRC 258, 262 (2019) (quoting *Vermont Yankee Nuclear Power Corp. and AmerGen Vermont, LLC* (Vermont Yankee Nuclear Power Station), CLI-00-17, 52 NRC 79, 83 (2000)).

We consider today the petition for leave to intervene and request for a hearing filed by the organization Pilgrim Watch.<sup>5</sup> The Applicants oppose the request.<sup>6</sup> The NRC Staff is not participating in this proceeding. For the reasons outlined below, we deny Pilgrim Watch's request for a hearing.

### I. BACKGROUND

# A. The License Transfer Application

As outlined in the application, the proposed license transfers would be effectuated pursuant to the terms of an Equity Purchase and Sale Agreement, pursuant to which 100% of the equity interests in ENGC would be transferred to Holtec International.<sup>7</sup> Upon closing of the agreement, indirect control of ENGC would transfer from ENGC's parent companies to Holtec International.<sup>8</sup> ENGC's name would immediately be changed to Holtec Pilgrim,<sup>9</sup> which would

<sup>&</sup>lt;sup>5</sup> *Pilgrim Watch Petition to Intervene and Hearing Request* (Feb. 20, 2019) (PW Petition). The Commonwealth of Massachusetts also petitioned to intervene; that matter has been settled. *See Commonwealth of Massachusetts' Petition for Leave to Intervene and Hearing Request* (Feb. 20, 2019); *Commonwealth of Massachusetts' Notice of Withdrawal of its Petition for Leave to Intervene and Hearing Request* (June 19, 2020). Because the settlement agreement has not been filed on the docket, we take no position on its substance and we do not consider its effect on Pilgrim Watch's proposed contentions. The NRC is not a party to the settlement agreement and therefore is not bound by its terms.

<sup>&</sup>lt;sup>6</sup> Applicants' Answer Opposing Pilgrim Watch Petition for Leave to Intervene and Hearing Request (Mar. 18, 2019) (Applicants Answer to PW).

<sup>&</sup>lt;sup>7</sup> The Applicants relied on the Staff's order approving the transfers and closed the transfer transaction on August 26, 2019. But because the transfers have been challenged in this proceeding, they lack final NRC approval and are therefore still provisional in nature. We refer in this decision to the license transfers as they were proposed in the application.

<sup>&</sup>lt;sup>8</sup> See Application for Order Consenting to Direct and Indirect Transfers of Control of Licenses and Approving Conforming License Amendment, and Request for Exemption from 10 C.F.R. § 50.82(a)(8)(i)(A), at 1 (Application), attached (Encl. 1) to Letter from A. Christopher Bakken III, ENOI, to NRC Document Control Desk (Nov. 16, 2018) (Cover Letter). The cover letter and application are available together under ML18320A031.

<sup>&</sup>lt;sup>9</sup> The Applicants state that although ENGC's name would be changed to Holtec Pilgrim, the same legal entity will continue to exist as Pilgrim's owner before and after the transfer. *See* Cover Letter at 2; Application at 1. More specifically, they state that prior to the proposed transaction's closing, ENGC would be converted to a limited liability company and that, under

be the licensed owner of Pilgrim. Holtec Pilgrim would own the Pilgrim facility and associated real estate and assets, including the nuclear decommissioning trust fund, which would be held outside of Holtec Pilgrim's administrative control.<sup>10</sup> Holtec Pilgrim also would hold title to the spent nuclear fuel stored at Pilgrim and would accede to the rights and obligations of ENGC under the Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Waste (Standard Contract)..<sup>11</sup> Holtec Pilgrim expects to recover, through litigation against the United States, the spent fuel management costs that it will incur resulting from DOE's breach of its contractual obligation to dispose of the Pilgrim spent nuclear fuel..<sup>12</sup>

Following the proposed license transfer, the operating authority to conduct licensed activities at Pilgrim would transfer from ENOI to HDI. Holtec International formed HDI to assume the licensed operator responsibilities for decommissioning nuclear power plants owned by Holtec International.<sup>13</sup> HDI will enter into a decommissioning operator services agreement with Holtec Pilgrim under which HDI will act as Holtec Pilgrim's agent and Holtec Pilgrim will pay HDI's operating costs..<sup>14</sup> Holtec Pilgrim would pay decommissioning, spent fuel management, and site restoration costs..<sup>15</sup>

HDI intends to contract with Comprehensive Decommissioning International, LLC (CDI), to serve as the decommissioning general contractor. CDI would perform the day-to-day

applicable Massachusetts law on such a conversion, the converted entity is considered to be the same entity as that which existed prior to the conversion. See Cover Letter at 2 n.1.

<sup>&</sup>lt;sup>10</sup> See Application at 1 & n.1. Certain assets are excluded from the purchase and sale agreement and would not be owned by Holtec Pilgrim. *Id*.

<sup>&</sup>lt;sup>11</sup> See id. at 19; see also 10 C.F.R. § 961.11 (text of contract). Boston Edison Company, a previous owner of Pilgrim, entered into the Standard Contract with the U.S. Department of Energy (DOE) in June 1983. See Application at 19.

<sup>&</sup>lt;sup>12</sup> Application at 19.

<sup>&</sup>lt;sup>13</sup> See id. at 1.

<sup>&</sup>lt;sup>14</sup> *Id*. at 2.

<sup>&</sup>lt;sup>15</sup> *Id*. at 16.

licensed activities, including decommissioning activities, subject to HDI's oversight and control as the licensed operator.<sup>16</sup> CDI was formed to perform decommissioning activities at decommissioning nuclear power plants owned by Holtec.<sup>17</sup> CDI is jointly owned by Holtec International (through its subsidiary HDI) and SNC-Lavalin Group (through its subsidiary Kentz USA Inc.).<sup>18</sup> In short, following the proposed license transfers, Holtec Pilgrim would be the licensed owner, and HDI would be the licensed operator of the Pilgrim facility.

Holtec Pilgrim and HDI intend to significantly expedite the decommissioning of Pilgrim by implementing the DECON method of decommissioning. Under the DECON approach, the structures, equipment, and portions of the facility that contain radioactive contaminants are "promptly removed or decontaminated to a level that permits termination of the license shortly after cessation of operations.".<sup>19</sup> If the proposed transfer is approved as a final matter, HDI intends to complete the transfer of spent nuclear fuel to the ISFSI as soon as practicable and to promptly proceed with decontaminating and dismantling the site (except for the ISFSI portion)..<sup>20</sup> HDI's stated goal is to complete radiological decommissioning and site restoration and to release the non-ISFSI portions of the site for unrestricted use within eight years after license transfer.<sup>21</sup> HDI outlined its plans and accelerated schedule for decommissioning Pilgrim in a revised Post-Shutdown Decommissioning Activities Report (PSDAR) that it submitted separate

<sup>21</sup> See *id*.

<sup>&</sup>lt;sup>16</sup> *Id*. at 2.

<sup>&</sup>lt;sup>17</sup> *Id*. at 3.

<sup>&</sup>lt;sup>18</sup> *Id*. at 2.

<sup>&</sup>lt;sup>19</sup> See "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, Supplement 1 Regarding the Decommissioning of Nuclear Power Reactors" (Final Report), NUREG-0586, Supplement 1, vol. 1 (Nov. 2002), at 3-16 (ML023470327 (package)) (Decommissioning GEIS).

<sup>&</sup>lt;sup>20</sup> See Application at 4.

from the application.<sup>22</sup> HDI's PSDAR was contingent on NRC approval of the license transfer application and closure of the asset sale.

ENOI submitted its own PSDAR in 2018 that outlined a decommissioning schedule based on delayed decommissioning under the SAFSTOR decommissioning approach.<sup>23</sup> The SAFSTOR method involves placing the facility in a "safe, stable condition . . . for a period of time, followed by subsequent decontamination and dismantlement to levels that permit license termination.".<sup>24</sup> Under SAFSTOR, after reactor fuel and radioactive liquids are removed, the facility is left intact for a long-term dormant period that allows for radioactivity levels to be significantly reduced by radioactive decay. If we were to rescind the Staff's order approving the license transfers, ENOI's PSDAR would go back into effect. As outlined in its PSDAR, ENOI's intention was to dismantle and decontaminate Pilgrim during the years 2074 to 2078, terminate the license in 2079, and complete site restoration by 2080.<sup>25</sup>

# **B.** Financial Qualification Review

Under the Atomic Energy Act (AEA) and associated regulations, the NRC must give written consent for a license transfer.<sup>26</sup> The NRC will approve a license transfer application if it determines that the proposed transferee is qualified to hold the license and that the proposed

<sup>&</sup>lt;sup>22</sup> See "DECON Post-Shutdown Decommissioning Activities Report," attached to Letter from Pamela B. Cowan, HDI, to NRC Document Control Desk (Nov. 16, 2018) (ML18320A040) (HDI PSDAR).

<sup>&</sup>lt;sup>23</sup> See "Pilgrim Post-Shutdown Decommissioning Activities Report," attached to Letter from Mandy K. Halter, ENOI, to NRC Document Control Desk (Nov. 16, 2018), at 7 (ML18320A034) (Entergy PSDAR).

<sup>&</sup>lt;sup>24</sup> Decommissioning GEIS at 3-19.

<sup>&</sup>lt;sup>25</sup> Entergy PSDAR at 7.

<sup>&</sup>lt;sup>26</sup> See AEA § 184, 42 U.S.C. § 2234 (providing that no license granted under the AEA "shall be transferred . . . directly or indirectly, through transfer of control of any license to any person, unless the Commission . . . shall give its consent in writing"); 10 C.F.R. §§ 50.80(a), 72.50(a) (implementing the AEA provision as to power reactor and ISFSI licenses, respectively).

transfer is consistent with applicable law, regulations, and orders.<sup>27</sup> The license transfer review is limited to specific matters, including the technical and financial qualifications of the proposed transferee.<sup>28</sup> A license transfer application must provide "reasonable assurance . . . that funds will be available to decommission the facility."<sup>29</sup> The application also must provide information sufficient to demonstrate the "financial qualification of the applicant to carry out . . . the activities" for which the license is sought.<sup>30</sup> Thus, a license transfer applicant for a reactor, like Pilgrim, that has permanently ceased operating must demonstrate that it has the financial qualifications to pay for managing the spent fuel on the site (e.g., transferring fuel from wet storage to dry and maintaining an ISFSI).<sup>31</sup>

NRC regulations outline acceptable methods of demonstrating financial assurance of decommissioning funding, including the "prepayment" method.<sup>32</sup> Prepayment refers to prepaid funds deposited in an account segregated from the licensee's assets and outside of the licensee's administrative control (such as a trust, escrow account, or government fund) in an amount that "would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected.".<sup>33</sup> A licensee that has set aside prepaid decommissioning funds based on a site-specific decommissioning cost estimate may take credit

<sup>32</sup> See 10 C.F.R. § 50.75(e)(1).

<sup>33</sup> Id. § 50.75(e)(1)(i).

<sup>&</sup>lt;sup>27</sup> See 10 C.F.R. § 50.80(c).

<sup>&</sup>lt;sup>28</sup> See id. § 50.80(b)(1)(i) (referencing 10 C.F.R. §§ 50.33 and 50.34).

<sup>&</sup>lt;sup>29</sup> See id. §§ 50.33(k)(1), 50.80(b)(1)(i); see also id. § 72.30(b)-(c) (regarding ISFSI decommissioning). cx

<sup>&</sup>lt;sup>30</sup> See *id.* § 50.33(f).

<sup>&</sup>lt;sup>31</sup> See, e.g., *id.* §§ 50.33(f), 50.33(k)(1), 72.30(b)-(c). Here, the Applicants need not demonstrate financial qualification to cover power reactor operating costs given that reactor operations have permanently ceased at Pilgrim. *See id.* § 50.33(f)(2); Letter from Brian R. Sullivan, ENOI, to NRC Document Control Desk (June 10, 2019) (ML19161A033).

for projected earnings on the account's funds, up to a 2% annual real rate of return, through the projected decommissioning period..<sup>34</sup>

In this case, Holtec Pilgrim relies on the prepayment method of financial assurance based on the funds available in the Pilgrim decommissioning trust fund. At closing, the trust was to contain a minimum value of \$1.03 billion. The Applicants claim that this amount will be sufficient—assuming a credit for projected interest earnings at an annual real rate of 2%—to pay the estimated costs of decommissioning, spent fuel management, and site restoration.<sup>35</sup> The Applicants estimate a total cost of \$1.134 billion (in 2018 dollars) to cover the estimated costs of decommissioning, spent fuel management (\$501 million), and site restoration (\$40 million).<sup>36</sup>

The application includes a cash flow analysis for the years 2019 through 2063, the year at which final license termination is contemplated. The analysis begins with a trust fund balance of \$1.03 billion given the terms in the equity purchase and sale agreement. For each year, the cash flow analysis identifies the projected (1) withdrawals from the trust fund to pay for decommissioning, spent fuel management, and site restoration costs; (2) interest earnings on the funds (based on a 2% real rate of return); and (3) trust fund year-end balances.<sup>37</sup> The cash flow analysis projects approximately \$217 million remaining in the fund at the end of 2025, following decommissioning, site restoration, and partial site release for unrestricted use of the non-ISFSI portions of the Pilgrim site. The analysis concludes that this amount, together with projected annual interest earnings on the fund, would be sufficient to pay for remaining spent

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<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> See Application at 16-18.

<sup>&</sup>lt;sup>36</sup> *See id.*, Attach. D, "Schedule & Financial Information for Decommissioning," tbl. "Decommissioning Cost Estimate Summary (Thousands of 2018 dollars)."

<sup>&</sup>lt;sup>37</sup> *See id.*, Attach. D, "Schedule & Financial Information for Decommissioning," tbl. "Pilgrim Nuclear Power Station Decommissioning Cash Flow Analysis."

fuel management costs and for the cost of decommissioning the ISFSI and restoring the ISFSI site. The cash flow analysis projects that approximately \$3.6 million would remain in the fund in 2063, following final expenditures for spent fuel management, ISFSI decommissioning, restoration of the ISFSI site, and final license termination..<sup>38</sup>

To demonstrate financial qualification for the license transfer, the Applicants rely only on the decommissioning trust fund. Holtec Pilgrim also states that it expects to recover—through litigation resulting in a judgment or settlement—hundreds of millions of dollars from the United States as reimbursements for spent fuel management costs that Holtec Pilgrim will incur due to DOE's breach of obligations under the Standard Contract.<sup>39</sup>

Our financial assurance requirements, combined with our procedures for review of a license transfer application, help ensure that a license is not transferred to an entity that will be financially unable to maintain and decommission the reactor facility and associated ISFSI. But as we recently emphasized in the *Oyster Creek* license transfer proceeding, our oversight of financial ability to decommission a facility and to manage the spent fuel on the site does not end after the financial qualification review.<sup>40</sup> A licensee in decommissioning must continue until the license is terminated to demonstrate annually that funding for both decommissioning and spent fuel management remains adequate. The NRC's examination of a transfer applicant's financial qualification therefore is conducted in light of regulatory requirements designed to ensure that funding remains sufficient until no longer needed.

For example, a licensee that has submitted its site-specific decommissioning cost estimate must submit to the NRC a financial assurance status report every year. The report

<sup>38</sup> Id.

<sup>&</sup>lt;sup>39</sup> See, e.g., Applicants Answer to PW at 20 ("[T]he additional funds that Holtec Pilgrim will receive through recovery of spent fuel management costs provide hundreds of millions of dollars of additional cash flow that could be used to provide additional assurance if necessary.").

<sup>&</sup>lt;sup>40</sup> *Exelon Generation Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-19-6, 89 NRC 465, 475-76 (2019).

must include the following information, current through the end of the previous calendar year: (1) the amount spent on decommissioning, both cumulatively and over the previous calendar year; (2) the remaining balance in the decommissioning trust fund (as well as any amount provided by any additional financial assurance method relied on); (3) an estimate of the costs to complete decommissioning as well as the decommissioning criteria upon which the estimate is based; (4) the difference, if any, between the actual decommissioning costs incurred and the previously estimated costs for work performed during the year; (5) any modifications to a licensee's current method of providing financial assurance since the last submitted report; and (6) any material changes to trust agreements or financial assurance contracts.<sup>41</sup>

If the remaining decommissioning funds, together with the projected earnings on those funds—calculated at a rate no greater than a 2% real rate of return—are not sufficient to cover the estimated cost to complete decommissioning, the licensee must include in the status report additional financial assurance to cover the remaining estimated costs.<sup>42</sup> Such additional assurance might be in the form of a deposit to the trust fund or other prepayment, a parent guarantee, or other method that the Staff may approve pursuant to our regulations.<sup>43</sup>

The NRC also requires licensees that have submitted a site-specific decommissioning cost estimate to provide an annual report on the status of their spent fuel management funding. This report must specify the amount of funds available to cover the cost of managing the spent fuel and the projected cost of managing the fuel until DOE takes title to and possession of the fuel.<sup>44</sup> If the available funds are not sufficient to cover the projected cost, the report must

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<sup>&</sup>lt;sup>41</sup> See 10 C.F.R. § 50.82(a)(8)(v).

<sup>&</sup>lt;sup>42</sup> *Id.* § 50.82(a)(8)(vi).

<sup>&</sup>lt;sup>43</sup> See id. § 50.75(e)(1).

<sup>&</sup>lt;sup>44</sup> Id. § 50.82(a)(8)(vii)(A)-(B).

include a plan to obtain the additional funds to cover the cost.<sup>45</sup> In addition, a licensee must provide to the NRC, for its review and preliminary approval, a program to manage and to provide funding for managing all spent fuel at the reactor.<sup>46</sup>

Additional NRC regulations on decommissioning also help to ensure that adequate decommissioning funding is maintained. For example, a licensee must first notify the NRC in writing, with a copy to the affected State(s), before performing any decommissioning activity that would significantly increase the estimated site-specific decommissioning cost beyond that provided to the NRC.<sup>47</sup> And NRC regulations prohibit a licensee from conducting any decommissioning activity that would result in a loss of reasonable assurance that adequate funds will be available for decommissioning.<sup>48</sup>

In short, the NRC's financial qualification review for a license transfer will not be the only examination of a transferee's ability to pay for decommissioning and spent fuel management. Subject to the NRC's oversight and requirements, a licensee must annually continue to show adequate funding until the license has been terminated and all spent fuel has been removed from the site.<sup>49</sup>

### C. Exemption Request

NRC regulations do not permit licensees to use a decommissioning trust fund to pay for activities that do not fall under the NRC's definition of decommissioning.<sup>50</sup> Because Holtec

<sup>49</sup> *Id.* § 50.82(a)(8)(v)-(vii).

<sup>50</sup> See *id.* § 50.82(a)(8)(i)(A) (withdrawals from the decommissioning trust fund may be made for "expenses for legitimate decommissioning activities consistent with the definition of decommissioning in § 50.2"). As defined in 10 C.F.R. § 50.2, to "decommission" means "to remove a facility or site safely from service and reduce residual radioactivity to a level that

<sup>&</sup>lt;sup>45</sup> *Id.* § 50.82(a)(8)(vii)(C).

<sup>&</sup>lt;sup>46</sup> *Id.* § 50.54(bb).

<sup>&</sup>lt;sup>47</sup> See id. § 50.82(a)(7) (referencing the decommissioning cost estimate provided to the NRC in a licensee's PSDAR).

<sup>&</sup>lt;sup>48</sup> *Id.* § 50.82(a)(6)(iii).

Pilgrim and HDI intend to use the trust fund to pay not only for decommissioning costs but also for spent fuel management and non-radiological site restoration costs, they needed to obtain and requested as part of the application—an exemption from 10 C.F.R. § 50.82(a)(8)(i)(A), which limits trust fund withdrawals to decommissioning activities.<sup>51</sup>

In the exemption request, HDI stated that the amount in the decommissioning trust fund exceeds the amount necessary to complete radiological decommissioning, spent fuel management, and site restoration. HDI stated that if it were unable to use the trust fund for spent fuel management and site restoration expenses, it would need to "provide additional funding that would not be recoverable from the trust fund until the [Pilgrim] license is terminated."<sup>52</sup> HDI stated that it would bear an unnecessary and undue burden if it were unable to withdraw funds in the trust that exceed those required to pay for decommissioning activities. In support of the exemption request, HDI enclosed the same cash flow analysis submitted in the financial qualification section of the application. The analysis depicts HDI's projected trust fund withdrawals over the years 2019 through 2063 and shows approximately \$3.6 million remaining in the fund at final license termination.<sup>53</sup> HDI noted in its request that the NRC has granted several other requests for an exemption from 10 C.F.R. § 50.82(a)(8)(i)(A), including for the Vermont Yankee, Oyster Creek, Crystal River Unit 3, and Kewaunee facilities. The Staff approved the Pilgrim exemption request on August 22, 2019.<sup>54</sup>

permits - (1) [r]elease of the property for unrestricted use and termination of the license; or (2) [r]elease of the property under restricted conditions and termination of the license."

<sup>&</sup>lt;sup>51</sup> See Encl. 2 to Cover Letter, HDI Request for Exemption from 10 CFR 50.82(a)(8)(i)(A) (Exemption Request).

<sup>&</sup>lt;sup>52</sup> See *id.* at E-6.

<sup>&</sup>lt;sup>53</sup> *See id.*, tbl.1, "Annual DECON Decommissioning Fund Cash Flow for the Pilgrim Nuclear Power Station."

<sup>&</sup>lt;sup>54</sup> The exemption was "effective upon the NRC's issuance of a conforming license amendment reflecting HDI and Holtec Pilgrim as the licensees for Pilgrim, following NRC approval of the license transfer application and the Applicants' completion of the transaction." Exemption at 12.

The exemption is within the scope of this adjudication because Holtec's demonstration of financial qualification for the license transfer relies on the exemption. Specifically, Holtec must demonstrate reasonable assurance that funds will be available to decommission the facility and must show its financial qualification to carry out the activities for which the license is sought, which here includes the spent fuel management activities.<sup>55</sup> Holtec estimates spent fuel management costs in the amount of \$501,467,000. Relying on the requested exemption, Holtec therefore plans to withdraw an estimated \$501 million from the trust fund to pay for the spent fuel management expenses. The exemption also allows Holtec to withdraw funds from the trust fund to pay for site restoration, which Holtec estimates will cost approximately \$40 million.<sup>56</sup>

#### D. The Staff's Approval of the Transfer

NRC regulations specify that even where an adjudicatory hearing in the proceeding is pending, the Staff is expected, consistent with the findings in its SER, to promptly issue an approval or denial of a request for license transfer.<sup>57</sup> But in such circumstances, a Staff approval will not constitute final agency action on the application. If the NRC receives a hearing request on a license transfer application, we review the request to determine if it satisfies the standards for intervention warranting a hearing and, if it does, we must consider the merits of the arguments presented. And while the Staff's review of the application may overlap with our review of the participants' adjudicatory challenges to the application, "they are separate reviews,

<sup>&</sup>lt;sup>55</sup> See 10 C.F.R. § 50.33(f), (k)(1).

<sup>&</sup>lt;sup>56</sup> Site restoration is a state-regulated matter. For the license transfer itself, therefore, Holtec need not show funding sufficient to complete site restoration, which includes satisfying state standards for the clean-up of non-radiological contaminants.

<sup>&</sup>lt;sup>57</sup> 10 C.F.R. § 2.1316(a). The "Commission relies on the staff, subject to Commission oversight, to exercise good judgment" regarding whether there are "circumstances that might warrant delay in the staff's review or action on the application." *See* Streamlined Hearing Process for NRC Approval of License Transfers, Final Rule, 63 Fed. Reg. 66,721, 66,726 (Dec. 3, 1998) (Streamlined Hearing Process).

each of which must be completed and satisfied before a license transfer approval can be considered final."<sup>58</sup>

While applicants may close a license transfer transaction despite the lack of final agency approval of the application, they do so at their own risk "in the event that the Commission later determines that intervenors have raised valid objections to the license transfer application.".<sup>59</sup> Applicants that act on a Staff order bear the risk that we may ultimately—based on the results of a potential or pending hearing—modify or impose new license conditions relating to the transfer, or rescind the Staff's approval.

Consistent with these principles, the Staff's August 22, 2019, Order approving this license transfer contained the following condition:

The NRC staff's approval of this license transfer is subject to the Commission's authority to rescind, modify, or condition the approved transfer based on the outcome of any post-effectiveness hearing on the license transfer application. For example, if the Commission overturns the NRC staff's approval of this license transfer, this Order and any conforming amendments reflecting this transfer, will be rescinded, and the Applicants must return the plant ownership to the status quo ante and revert to the conditions existing before the transfer.<sup>60</sup>

# E. Issuance of License Amendment on Immediately Effective Basis

After the transaction closed, the Staff issued the license amendment reflecting the

transfer and the name change as well as the deletion of four financial license conditions

imposed when the NRC approved the transfer of the Pilgrim license from the Boston Edison

Company..<sup>61</sup> This included License Condition J (4), which had required ENGC to have access

to contingency funding of "not less than fifty million dollars (\$50m) for payment, if needed, of

Pilgrim operating and maintenance expenses, the cost to transition to decommissioning status

<sup>&</sup>lt;sup>58</sup> CLI-19-11, 90 NRC at 262.

<sup>&</sup>lt;sup>59</sup> See id. at 262-63 (quoting Vermont Yankee, CLI-00-17, 52 NRC at 83).

<sup>&</sup>lt;sup>60</sup> Order Approving Transfers at 6, Condition (2).

<sup>&</sup>lt;sup>61</sup> See Notification of Issuance of Conforming Amendment (Aug. 27, 2019); License Amendment.

in the event of a decision to permanently shut down the unit, and decommissioning costs.".<sup>62</sup> The condition specified that once the plant had shut down following a decision to decommission, "Entergy Nuclear will use any remainder of the \$50m contingency fund that has not been used to safely operate and maintain the plant to support the safe and prompt decommissioning of the plant, to the extent such funds are needed for safe and prompt decommissioning."<sup>63</sup> The condition did not affect the NRC's authority to ensure that adequate funds would "remain available in the plant's separate decommissioning fund," which would be maintained pursuant to NRC regulations and oversight..<sup>64</sup>

The Staff issued the amendment on an immediately effective basis based on a determination that the amendment involved "no significant hazards consideration."<sup>65</sup> The Staff noted that the NRC had generically determined that any amendment to a power reactor or ISFSI license that "does no more than conform the license to reflect the transfer action" involves "no significant hazards consideration."<sup>66</sup> The Staff further stated that "[n]o contrary determination ha[d] been made with respect to this specific application."<sup>67</sup>

<sup>63</sup> Id.

<sup>64</sup> *Id.* 

<sup>67</sup> Id.

 <sup>&</sup>lt;sup>62</sup> See Application, Attach. A, "Renewed Facility Operating License (Changes)," at 4, Condition J (4) (License Condition J (4)).

<sup>&</sup>lt;sup>65</sup> See Safety Evaluation by the Office of Nuclear Reactor Regulation Related to the Request for Direct and Indirect Transfer (Aug. 22, 2019), at 25 (ML19170A250) (SER); see also AEA § 189a., 42 U.S.C. § 2239(a)(2)(A).

<sup>&</sup>lt;sup>66</sup> SER at 25 (citing 10 C.F.R. § 2.1315).

#### **II. DISCUSSION**

#### A. Intervention Requirements

To intervene in an NRC licensing proceeding, a petitioner must show standing to intervene and submit at least one admissible contention for hearing.<sup>68</sup> Because we do not find Pilgrim Watch's proffered contentions admissible, we do not reach Pilgrim Watch's standing to intervene in this proceeding.

NRC regulations in 10 C.F.R. § 2.309(f)(1) specify the requirements for an admissible contention. For each contention, a petitioner must explain the contention's basis and provide supporting facts or expert opinion on which the petitioner intends to rely in litigating the contention with references to specific sources or documents on which the petitioner intends to rely. To be admissible, a contention must fall within the scope of the proceeding and be material to the findings that the NRC must make for the proposed licensing action. The petitioner must identify the specific portions of the application that the petitioner disputes along with the supporting reasons for each dispute; or, if a petitioner must identify each failure and provide supporting reasons for the petitioner's belief. We long have emphasized that these contention admissibility requirements are strict..<sup>69</sup> They are intended to ensure that adjudicatory hearings are triggered only by substantive safety or environmental issues that raise a supported dispute with the application on a matter material to the NRC's decision on the challenged action.

<sup>&</sup>lt;sup>68</sup> See 10 C.F.R. § 2.309(a), (d), (f); Hearing Opportunity Notice, 84 Fed. Reg. at 816-17 (referencing requirements for intervention).

<sup>&</sup>lt;sup>69</sup> See, e.g., Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999) (describing reasons why the NRC tightened its contention admissibility standards in 1989).

### B. Pilgrim Watch's Petition

In its Petition, Pilgrim Watch proffers two contentions challenging Holtec's application. In Contention I, Pilgrim Watch challenges Holtec's demonstration of financial qualification.<sup>70</sup> In Contention II, Pilgrim Watch raises environmental claims. Pilgrim Watch argues that the license transfer action requires a National Environmental Policy Act (NEPA) analysis and that the application therefore needed to include an environmental report. It also argues that the categorical exclusion in 10 C.F.R. § 51.22(c)(21) does not apply to this proceeding.<sup>71</sup>

As an initial matter, in its petition Pilgrim Watch states that it adopts and incorporates by reference the Commonwealth of Massachusetts's (Commonwealth's) "[c]ontentions in this proceeding together with all of the Attorney General's supporting bases and evidence."<sup>72</sup> But because we find—as discussed below—that Pilgrim Watch has not submitted at least one admissible contention of its own, we reject its effort to adopt the Commonwealth's contentions.

Our regulation on contention adoption, 10 C.F.R. § 2.309(f)(3), does not specifically address whether a petitioner who has not independently gained party status in a proceeding may adopt another party's contention. We have dealt with the issue of contention adoption in the past, but we have not directly dealt with contention adoption by a party who has not met the requirements for intervention. However, we discussed this scenario in *Consolidated Edison Co. of New York* (Indian Point Units 1 and 2)...<sup>73</sup> In that case the Commission allowed Petitioners who had admissible contentions to adopt each other's contentions...<sup>74</sup> While we accepted

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<sup>&</sup>lt;sup>70</sup> See PW Petition at 14-82.

<sup>&</sup>lt;sup>71</sup> *Id.* at 4, 89-90.

<sup>&</sup>lt;sup>72</sup> See id. at 130-31; see supra note 5.

<sup>&</sup>lt;sup>73</sup> CLI-01-19, 54 NRC 109 (2001).

<sup>&</sup>lt;sup>74</sup> *Id.* at 132-33. Because this case preceded the addition of § 2.309(f)(3) to our regulations, it speaks of incorporation by reference rather than adoption.

contention adoption in that circumstance, we cautioned that we "would not accept incorporation by reference of another petitioner's issues . . . where the petitioner has not independently established compliance with our requirements for admission as a party . . . by submitting at least one admissible issue of its own."<sup>75</sup> And in 2008, after § 2.309(f)(3) was added to our regulations, a Licensing Board addressed this precise question, concluding that, "based on the clear statement of the Commission's view [in *Indian Point*], . . . in order for a petitioner to adopt the contention of another petitioner, it must first demonstrate that it has standing and submit its own admissible contention."<sup>76</sup> We therefore hold that a petitioner must be admitted to a proceeding as a party, by demonstrating standing and submitting at least one admissible contention, before it may be permitted to adopt another party's contention, arguments, or evidentiary support. Otherwise, petitioners with little or no knowledge of the issues raised in adopted contentions might be admitted as parties to litigate those contentions in our proceedings. This would essentially defeat the purpose of our contention admissibility standards, which are meant to ensure that parties to a proceeding have demonstrated the necessary factual or legal knowledge to participate meaningfully.

### 1. Pilgrim Watch's Contention I

In Contention I, Pilgrim Watch argues that the application does not provide adequate financial assurance. Pilgrim Watch claims that the application does not show that either Holtec Pilgrim or HDI is "financially responsible" or that either has access to adequate funds for decommissioning.<sup>77</sup> Pilgrim Watch also claims that the application does not show that Holtec Pilgrim and HDI have or will have the financial resources to pay for environmental impacts that

<sup>75</sup> Id.

<sup>&</sup>lt;sup>76</sup> See Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 65-66 (2008).

<sup>&</sup>lt;sup>77</sup> PW Petition at 14.

will place the public health and safety and the environment at risk. Pilgrim Watch is concerned that the only asset that Holtec Pilgrim and HDI rely on in the application is the decommissioning trust fund.<sup>78</sup>

### a. Accuracy of Current Cost Estimates

Contention I involves consideration of Holtec's site-specific decommissioning cost estimate. The following observations guide our assessment of the issues Pilgrim Watch has raised. Although the NRC has provided guidance on this topic, we have not established specific regulatory requirements governing the contents and the degree of supporting detail that must be provided. In the past, license transfer hearings proceedings have typically involved operating reactors, and license transfer applicants in those cases generally showed reasonable assurance of decommissioning funding by using the NRC's generic, formula-derived estimate..<sup>79</sup> Within two years following permanent cessation of operations, however, a licensee must submit a site-specific decommissioning cost estimate to the NRC. Thus, Holtec prepared and submitted to the NRC a site-specific decommissioning cost estimate. Contention I raises issues concerning the validity of this assessment.

At this early stage in the decommissioning process, cost estimates are necessarily uncertain. This observation is as true for a site-specific decommissioning cost estimate submitted by a current licensee as it is for one submitted by a license transfer applicant. We see no reason to require that a transfer applicant's cost estimate be more detailed, more certain, or more conservative than the site-specific estimate submitted by a current licensee.

Moreover, the financial qualification review for license transfer ensures that a license is not transferred to an entity that lacks the financial capability to meet the expenses of decommissioning and spent fuel management. The cash flow analysis is a snapshot in time

<sup>&</sup>lt;sup>78</sup> See id.

<sup>&</sup>lt;sup>79</sup> See 10 C.F.R. § 50.75(b), (c).

based on particular cost estimates and assumptions, the amount accumulated in the trust fund and projected net interest gains, and any other applicable financial assurance. Actual costs and gains may fluctuate above and below original predictions (e.g., actual real rates of return may prove higher or lower than the 2% real rate of return that the NRC allows the applicant to credit). And if a transfer is approved, the NRC will, as discussed above, continuously oversee the adequacy of the decommissioning and spent fuel management funding until the license is terminated.

In our license transfer adjudications, we deem financial assurance to be acceptable if it is based on plausible assumptions and forecasts, even if "the possibility is not insignificant that things will turn out less favorably than expected."<sup>80</sup> We have likewise held that the "mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance."<sup>81</sup> Further, we have recognized that the potential safety impacts, if any, from a shortfall in financial funding would not be "so direct or immediate as the safety impacts of significant technical deficiencies."<sup>82</sup> Therefore, we recognize that the demonstration of reasonable assurance of financial qualification is flexible.<sup>83</sup> Accordingly, we will admit for hearing here only those contentions based upon adequately supported assertions that a transfer applicant's financial assumptions and forecasts are implausible or unrealistic in a way that is material to our assessment of reasonable assurance.

<sup>&</sup>lt;sup>80</sup> See North Atlantic Energy Service Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 222 (1999).

<sup>&</sup>lt;sup>81</sup> *Id.* 

<sup>&</sup>lt;sup>82</sup> *Id.* at 221.

<sup>&</sup>lt;sup>83</sup> See *id.* at 221-22; see also Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 9 (1978). To determine financial qualification the NRC will "require the minimum amount of information necessary for that purpose." See 10 C.F.R. Part 50, Appendix C (regarding guidance for the financial data and related information required to establish the financial qualification for construction permits and combined licenses).

In the application, Holtec stated that in preparing the cost estimates, it (1) considered the input of experienced decommissioning, demolition, and waste management specialty subcontractors, and of subject-matter experts; (2) reviewed Entergy's site-specific decommissioning cost estimate; (3) reviewed decommissioning cost data from plants in the United States that have started or completed decommissioning; (4) obtained pricing information from waste disposal facilities; and (5) reviewed plant data and historical information obtained from Entergy, including records of spills and unusual occurrences involving contamination that are maintained pursuant to 10 C.F.R. § 50.75(g).<sup>84</sup>

In support of the decommissioning and site restoration cost estimates, Holtec provided line-item cost estimates for specified categories of activities for decommissioning and for site restoration.<sup>85</sup> It included, for example, the estimated volumes and weights of low-level radioactive waste (broken down by waste class) and of Greater-than-Class-C Waste and estimated labor costs (broken down into management, professional labor, and craft labor categories). For the reasons discussed below, we find that Pilgrim Watch has not raised a supported, admissible challenge warranting litigation on the plausibility of the current cost estimates.

### b. Sufficiency of Contingency Allowance

Pilgrim Watch claims that Holtec's decommissioning cost estimate contains an inadequate amount of contingency funding.<sup>86</sup> It notes that an extra 17% has been added to the

<sup>&</sup>lt;sup>84</sup> See Application, Attach. D, "Schedule & Financial Information for Decommissioning," at 2 (unnumbered); HDI PSDAR, Encl. 1, Site-Specific Decommissioning Cost Estimate, at 7, 36-37, 48 (DCE).

<sup>&</sup>lt;sup>85</sup> See, e.g., DCE at 8, 28-34, 54.

<sup>&</sup>lt;sup>86</sup> The contingency allowance in Entergy's site-specific decommissioning cost estimate was derived from an examination of the major activities (*e.g.*, decontamination, segmentation, equipment handling, packaging, transport, and waste disposal) that have been known historically to require a contingency allocation. These activities were each assigned a respective contingency value based on the difficulty of the decommissioning task and actual experience with decommissioning projects (*e.g.*, 75% for reactor segmentation; 50% for

decommissioning, site restoration, and spent fuel management cost estimates to account for contingencies, but Pilgrim Watch asserts that this additional amount is expected to be "fully consumed" and does not adequately account for inflation or increases in prices of goods and services over the course of the project.<sup>87</sup> However, licensees' site-specific decommissioning cost estimates usually include a contingency allowance to cover the estimated amount of additional expenses. NRC guidance provides for licensees to update their decommissioning cost estimate yearly for inflation and as appropriate for other significant increases in project costs.<sup>88</sup> That the additional amount added to the decommissioning, site restoration, and spent fuel management cost estimates is expected to be fully expended in the course of the planned activities does not raise a genuine material dispute with Holtec's demonstration of financial qualification. The NRC does not have a minimum contingency requirement for the site-specific estimate, and Holtec's 17% contingency allowance falls within the range of contingency allowances that have been commonly added to site-specific decommissioning cost estimates.<sup>89</sup>

<sup>87</sup> See PW Petition at 22.

decontamination; 25% for low-level waste disposal; 15% for heavy equipment and tooling). See Entergy Site-Specific Decommissioning Cost Estimate, § 3.3.1 (Contingency), at 4, attached to Entergy PSDAR (Entergy DCE). Twenty-six different decommissioning tasks in Entergy's DCE were assigned a contingency value. The contingency values were applied on a line-item basis. The estimated costs for each of the twenty-six separate components of work were multiplied by their assigned contingency value and the results were added to the decommissioning cost. These additional amounts added to the decommissioning cost estimate were summed together. For Entergy, the total amount for contingency represented 16.92% of the total estimated cost for license termination, spent fuel management, and site restoration.

<sup>&</sup>lt;sup>88</sup> *See* Assuring the Availability of Funds for Decommissioning Nuclear Reactors, Regulatory Guide 1.159, rev. 2 (Oct. 2011), at 12 (ML112160012) (Regulatory Guide 1.159).

<sup>&</sup>lt;sup>89</sup> See, e.g., Crystal River Nuclear Generating Station Unit 3 Site Specific Decommissioning Cost Estimate (May 2018), app. C, tbl.C (last page) (ML18178A181) (18.2% contingency allowance); Fort Calhoun Station Site-Specific Decommissioning Cost Estimate (attached to PSDAR) (Feb. 2017), app. C, tbl.C (last page) (ML17089A59) (16.33% contingency allowance); Three Mile Island Unit 1 Site-Specific Decommissioning Cost Estimate (Apr. 2019) § 6.1, at 19 (ML19095A010) (12.9% contingency allowance); Decommissioning Cost Analysis for the Monticello Nuclear Generating Plant (Oct. 2014), app. D, tbl. D (last page) (ML16005A105) (16.94% contingency allowance).

Pilgrim Watch claims that Holtec's contingency factor does not satisfy 10 C.F.R. § 72.30(b)(2)(ii), which requires a decommissioning cost estimate to contain an "adequate contingency factor." But that regulation refers to a contingency factor to be applied to the decommissioning cost estimate for an ISFSI, not to a power reactor. For ISFSI decommissioning, Holtec included a contingency allowance of 25%, which is consistent with NRC guidance on the ISFSI decommissioning cost estimate.<sup>90</sup> Pilgrim Watch has not identified a genuine material dispute with the application over the 17% contingency factor that Holtec applied to the decommissioning, site restoration, and spent fuel management cost estimates.

### c. Rate of Return Used in Cost Estimate

While Pilgrim Watch accepts that the NRC by regulation allows licensees to assume an annual real rate of return on the trust fund of 2% over inflation, Pilgrim Watch asserts that decommissioning costs will escalate at a higher rate than inflation. It therefore claims that the additional cost increases over inflation in the decommissioning costs "will wipe-out" the estimated \$3 million dollars that Holtec's cash flow analysis predicts will remain in the trust fund at final license termination in 2063.<sup>91</sup> We disagree for several reasons. First, we find unsupported Pilgrim Watch's argument that decommissioning costs will increase at an annual rate higher than inflation.<sup>92</sup> Pilgrim Watch does not provide either an affidavit from an expert or another source supporting its predictions. Indeed, Pilgrim Watch's own cited reference, a report describing the total estimated decommissioning costs of dozens of plants, stated that total costs "hovered around" the same level for four years between 2014 to 2017.<sup>93</sup> And the cited report

<sup>&</sup>lt;sup>90</sup> *See* "Consolidated Decommissioning Guidance, Financial Assurance, Recordkeeping, and Timeliness," NUREG-1757, vol. 3, rev. 1 (Feb. 2012), at 4-11; DCE at 25-26.

<sup>&</sup>lt;sup>91</sup> See PW Petition at 24.

<sup>&</sup>lt;sup>92</sup> See id. at 24-25.

<sup>&</sup>lt;sup>93</sup> See "2018 Nuclear Decommissioning Funding Study," Callan Investments Institute, at 3, 9 (2018 Callan Report); PW Petition at 24. Pilgrim Watch also references a 2015 Callan report stating that total decommissioning cost estimates rose approximately 60% between 2008 and

described total decommissioning costs as having *decreased* in 2017.<sup>94</sup> Regardless of increases in particular decommissioning-related costs that may have occurred *prior to 2014*, Pilgrim Watch does not support its claim that decommissioning costs will escalate annually at a rate higher than inflation going forward. With significant increases in the numbers of plants that are entering decommissioning, it is difficult to predict how gained experience and economies of scale will affect decommissioning costs, and Pilgrim Watch's cited references do not support its claim that the "only rational and factually supportable assumption would be that decommissioning costs will increase at an annual rate that is at least about 4% higher than the rate of annual inflation.".<sup>95</sup>

Second, even were Pilgrim Watch's predictions to come true, the NRC will be able to monitor increased withdrawals from the trust fund and increased projected costs as reported in the annual decommissioning financial assurance status reports.<sup>96</sup> As described above, if the status report predicts a shortfall in funding, the licensee must provide additional financial assurance.<sup>97</sup> Consistent with NRC guidance, Holtec should adjust its decommissioning cost estimate at least once a year to ensure that the estimate reflects cost changes from inflation or

<sup>2014.</sup> But the 2015 report also noted that part of the increase in costs was due to more licensees using a site-specific decommissioning cost estimate, which, unlike cost estimates derived from the NRC's minimum formula in 10 C.F.R. § 50.75(c), also included site restoration and spent fuel management costs, which the report noted can "run into the hundreds of millions of dollars." *See* "2015 Nuclear Decommissioning Funding Study, Callan Investment Institute," at 3. And Pilgrim Watch refers to a 2011 NRC list of questions and answers, in which one answer addressed increases over a twenty-year period in cost escalation factors, including labor, energy, and low-level waste disposal, used to escalate decommissioning costs based on the 10 C.F.R. § 50.75(c) generic minimum formula. *See* PW Petition at 23 (citing NRC Questions and Answers, Encl. 5, SECY-11-0133 (ML111950031)). But Pilgrim Watch does not acknowledge that Holtec's low-level waste disposal estimates are based on pricing that was "confirmed" by selected waste disposal facilities. *See* DCE at 26.

<sup>&</sup>lt;sup>94</sup> See 2018 Callan Report at 9.

<sup>&</sup>lt;sup>95</sup> See PW Petition at 24.

<sup>&</sup>lt;sup>96</sup> See 10 C.F.R. § 50.82(a)(8)(v).

<sup>&</sup>lt;sup>97</sup> See id. § 50.82(a)(8)(vi).

other cost factors.<sup>98</sup> Rather than speculate about highly uncertain circumstances and events, it is appropriate to rely on close annual monitoring of expenditures, projected remaining expenses, and remaining funding. Further, Holtec must provide its license termination plan at least two years prior to its expected date for partial site release (approximately 2026) with an updated decommissioning cost estimate, which provides another significant occasion to assess the adequacy of decommissioning funding.<sup>99</sup> At that point, many decommissioning activities will already have taken place; actual costs of completed activities will be known; a site characterization will have been completed; and an updated decommissioning cost estimate based on refined site condition information will be provided..<sup>100</sup>

Pilgrim Watch provides no support for its additional claim that spent fuel management costs could potentially increase (from 2019 to 2063) at an annual rate of 4% over inflation.<sup>101</sup> Notably, spent fuel management costs from the time of partial license termination (approximately 2027-28) until 2063 would only entail those relating to maintenance and oversight of the ISFSI. Holtec will nonetheless have to annually inform the NRC of the status of its spent fuel management funding, and if its funding does not cover the projected costs, it would need to provide a funding plan to cover the costs.<sup>102</sup> To the extent that spent fuel

<sup>&</sup>lt;sup>98</sup> See Regulatory Guide 1.159 at 12 (addressing "Inflation" and "Frequency of Adjustment"); see also 10 C.F.R. § 50.82(a)(8)(v)(B) (financial assurance status report must include an "estimate of the costs to complete decommissioning, reflecting any difference between actual and estimated costs for work performed during the year, and the decommissioning criteria upon which the estimate is based").

<sup>&</sup>lt;sup>99</sup> See Applicants Answer to PW at 19 (partial site release expected by 2026).

<sup>&</sup>lt;sup>100</sup> The NRC requires a licensee that specifies a delayed completion of decommissioning by including a storage or surveillance period to provide a means of adjusting cost estimates over the storage or surveillance period. *See* 10 C.F.R. § 50.82(a)(8)(iv). We do not have a similar requirement for licensees using the DECON approach to decommissioning, but such licensees would be expected within a short time-frame to submit an updated cost estimate with a license termination plan.

<sup>&</sup>lt;sup>101</sup> See PW Petition at 25.

<sup>&</sup>lt;sup>102</sup> 10 C.F.R. § 50.82(a)(8)(vii) (status report); *see also* 10 C.F.R. § 50.55(bb) (spent fuel management funding plan).

management costs may prove to be higher than currently estimated, we expect that Holtec would seek correspondingly higher amounts in its litigation asserting breach of the Standard Contract. Pilgrim Watch does not claim that Holtec will not be able to obtain reimbursement for its spent fuel management costs. Pilgrim Watch effectively claims that, in the event of an actual or projected funding shortfall, Holtec will refuse to make additional financial commitments and, in so doing, would choose to violate NRC regulations. We decline to make this assumption.

# d. Claims Relating to Future Actions by DOE

Pilgrim Watch raises cost-related claims relating to actions that DOE may take. Pilgrim Watch states that the Standard Contract with DOE currently requires spent fuel to be packaged into DOE-approved transportation casks. In addition, Pilgrim Watch challenges Holtec's assumptions regarding when DOE will remove the spent fuel from the Pilgrim site..<sup>103</sup>

Pilgrim Watch argues that if DOE were to mandate fuel repackaging, this could cause Holtec to incur significant unaccounted-for expenses.<sup>104</sup> We recognize that no certainty exists at this time regarding how DOE will ultimately perform regarding the Pilgrim spent fuel or which party would bear responsibility for the costs of transferring fuel to DOE-supplied containers. But DOE was found liable for breaching the Standard Contract and liable for licensees' related spent fuel management expenses; we will not presume, as a reason to deny a license transfer, that DOE will likely succeed in requiring licensees to bear additional fuel packaging-related expenses. Nor would this question be one that could reasonably be resolved in an NRC adjudicatory hearing. As for other potentially major—but uncertain—events, any significant increase in costs would warrant an updating of the decommissioning cost estimate and would be reflected in a licensee's annual status report, which must provide the projected remaining costs of decommissioning.

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<sup>&</sup>lt;sup>103</sup> See PW Petition at 26-31, 59.

<sup>&</sup>lt;sup>104</sup> See id. at 21, 30, 61-63.

Pilgrim Watch claims that Holtec has not justified its assumption that DOE will begin removing spent fuel from the Pilgrim site in 2030 and will complete removal of the fuel by 2062..<sup>105</sup> Pilgrim Watch further claims that Holtec has not explained how it would address the possibility of indefinite storage..<sup>106</sup> Pilgrim Watch argues that the Continued Storage Rule discussed onsite storage for 100 years; using the annual spent fuel management costs estimated in Holtec's PSDAR, the additional fifty-seven years of storage would cost more than \$380 million..<sup>107</sup> Pilgrim Watch further argues that Holtec has not accounted for costs of replacing aging casks and replacing storage pads "every 100 years.".<sup>108</sup>

We do not require that the site-specific decommissioning cost estimate include estimated costs for potential but highly uncertain contingencies. That indefinite storage is "possible" does not make it likely, and we find it reasonable to expect that a repository will become available before 2063. While the NRC's generic environmental impact statement (GEIS) for the Continued Storage Rule acknowledges the possibility that fuel could remain onsite indefinitely, the GEIS also supports a conclusion that a repository will be available by 2063. Indeed, the GEIS notes that safe storage of spent fuel in a geologic repository is technically feasible using currently available technology, with no major breakthrough in science or technology needed, and it found "25 to 35 years . . . a reasonable period for repository development.".<sup>109</sup> As the GEIS describes, DOE's stated goal is to have a repository sited by 2026, the site characterized and the repository designed and licensed by 2042, and repository

<sup>107</sup> *Id*.

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<sup>&</sup>lt;sup>105</sup> See *id*. at 26-31, 59.

<sup>&</sup>lt;sup>106</sup> See *id*. at 30.

<sup>&</sup>lt;sup>108</sup> *Id*. at 30-31.

<sup>&</sup>lt;sup>109</sup> *See* Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (Final Report), NUREG-2157, vol. 1 (Sept. 2014), app. B, at B-2, B-8 to B-9 (ML14196A105).

operations started by 2048.<sup>110</sup> Holtec's final license termination timeframe is in our view plausible and therefore acceptable for financial assurance predictions.

If new information regarding repository development were to render the 2062 date unrealistic, the NRC would address any potential need for an adjustment to spent fuel management funding. In issuing the Continued Storage Rule, the NRC stated that the agency would "continue to monitor changes in national policy and developments in spent fuel storage and disposal technology.".<sup>111</sup> And the NRC noted that if future developments warrant, licensees could be required to "amend their licenses, which would be accompanied by site-specific safety and environmental reviews.".<sup>112</sup> We decline at this time to require licensees or transfer applicants to predict how the cost of spent fuel management will be borne in the future in the event indefinite storage is needed.

As to Holtec's assumption of 2030 as the starting date for DOE beginning the transfer of fuel from the Pilgrim site, Holtec states that, consistent with Entergy's spent fuel disposal plans for Pilgrim, the spent fuel would not necessarily go at that time to a final repository..<sup>113</sup> Pilgrim Watch references a Congressional Research Service report on civilian nuclear waste disposal that concludes that "longer on-site storage is almost a certainty," but the same report indicates that there have been corporate and legislative initiatives aimed at providing interim storage options..<sup>114</sup> And two separate applications for interim storage facilities are currently before the NRC. While those applications are still under review, and it is uncertain whether statutory changes will be made to allow DOE to take title to and transport the spent fuel to an interim

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<sup>&</sup>lt;sup>110</sup> *Id.* at B-8.

<sup>&</sup>lt;sup>111</sup> See Continued Storage of Spent Nuclear Fuel, Final Rule, 79 Fed. Reg. 56,238, 56,246 (Sept. 19, 2014).

<sup>&</sup>lt;sup>112</sup> *Id*.

<sup>&</sup>lt;sup>113</sup> See DCE at 43.

<sup>&</sup>lt;sup>114</sup> *See* PW Petition at 30 n.17; Congressional Research Service, "Civilian Nuclear Waste Disposal" (Sept. 6, 2018), at 4-5; 35-36.

disposal site, we accept as plausible that by 2030 a storage facility will be available to receive the Pilgrim waste.

Finally, because disposal of spent fuel and high-level waste is a federal responsibility, additional delays in DOE taking the Pilgrim spent fuel beyond 2030 would mean that Holtec could recover additional spent fuel management costs from DOE. Holtec already intends to seek reimbursements from DOE based on its estimated \$500 million in spent fuel management expenses. While Pilgrim Watch contests the lack of a license condition or other regulatory commitment requiring Holtec to use funds obtained through litigation or settlement for expenditures that exceed the currently estimated costs, it does not argue that Holtec is unlikely to receive substantial reimbursements for ongoing spent fuel management costs at Pilgrim—recoveries that could be used to defray additional costs if fuel removal does not begin in 2030..<sup>115</sup> Yearly spent fuel management costs are relatively predictable on a year-to-year basis, and the NRC would require an updated spent fuel management plan to address any major change resulting in a projected shortfall in spent fuel management funding.

#### e. Low Level Radioactive Waste Disposal Costs

Pilgrim Watch also raises the possibility that Holtec may not receive approval from the Texas Compact Commission to dispose of the Class B and C waste at Waste Control Specialists resulting in higher costs...<sup>116</sup> Holtec states that most of its waste meets the Class A definition but that for its Class B and C waste it will file an import petition with the Texas Compact Commission to obtain approval to dispose of out-of-compact waste. Holtec also states that it currently holds a contract with Waste Control Specialists permitting the disposal of radioactive waste from any decommissioning project in the United States...<sup>117</sup> But Pilgrim Watch

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<sup>&</sup>lt;sup>115</sup> PW Petition at 18, 26.

<sup>&</sup>lt;sup>116</sup> See *id.* at 59.

<sup>&</sup>lt;sup>117</sup> See, e.g., DCE at 27.

does not indicate that licensees have experienced difficulty in gaining approval from the Texas Compact Commission to import Class B and C waste for disposal at Waste Control Specialists. Based on the information before us, we have no basis to view as implausible Holtec's assumption that Class B and C waste will be disposed of at Waste Control Specialists.<sup>118</sup>

#### f. Delays in Work Schedule

Among its proposed scenarios of circumstances that could lead to increased costs, Pilgrim Watch claimed in its petition that delays in the decommissioning schedule may lead to a funding shortfall in the decommissioning trust.<sup>119</sup> Common types of delays due to weather, equipment, and labor generally are anticipated and covered by the contingency allowance that has been, as a general practice, added to the cost estimates. And, as we observe above, Holtec's total contingency allowance amount is consistent with that of other licensees and would be expected to cover common causes of delay. If a delay were to occur *and* it caused an overall schedule delay that significantly increased costs, we would expect such an increase to be reflected in the annual financial assurance status report on decommissioning funding. Therefore, Pilgrim Watch does not raise a genuine material dispute with the application over the potential costs of delays in decommissioning.

### g. Potential Denial of Exemption Request

Pilgrim Watch also argued that the application fails to consider what would happen if the exemption were not granted.<sup>120</sup> But the Applicants point out that if the exemption request were not granted, the Application would either be revised, withdrawn, or rejected.<sup>121</sup> We agree that this argument does not raise a genuine dispute with the application.

<sup>&</sup>lt;sup>118</sup> See Entergy DCE, § 1.3.2.

<sup>&</sup>lt;sup>119</sup> PW Petition at 21, 63, 127.

<sup>&</sup>lt;sup>120</sup> See id. at 64-65.

<sup>&</sup>lt;sup>121</sup> Applicants Answer to PW at 58.

### h. Scenarios Requiring Additional Financial Assurance

Pilgrim Watch likewise identifies scenarios that, if they occurred, would need to be addressed in the decommissioning or spent fuel management funding status reports and, as necessary, would require that Holtec provide additional financial assurance. These other scenarios include its assertions that Holtec may need to replace failed casks or pads;<sup>122</sup> spent fuel canisters may corrode and leak and need repair;<sup>123</sup> and terrorist attacks or acts of malice against the spent fuel pool or the ISFSI could cause dry cask rupture.<sup>124</sup> Pilgrim Watch does not link these scenarios with a supported challenge to a specific part of the application and therefore does not articulate a genuine dispute with the application. Moreover, as we have explained above, our regulatory structure assures that funding shortfalls will be identified and addressed on a regular basis. Pilgrim Watch does not show how these scenarios would go unaddressed, and thus its claims lack factual support.

*i.* Existing Contamination at the Site and Lack of Site Characterization

Pilgrim Watch next argues that Holtec's cost estimates are based on an incorrect assumption that the Pilgrim site is essentially "clean.".<sup>125</sup> But Pilgrim Watch does not identify any such claim in Holtec's application or cost estimate, nor do we find one...<sup>126</sup> We note that

<sup>124</sup> See *id*. at 71-76.

<sup>125</sup> See id. at 31.

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<sup>&</sup>lt;sup>122</sup> See PW Petition at 27, 30.

<sup>&</sup>lt;sup>123</sup> See *id*. at 31, 77. Pilgrim Watch raises, without support, a concern about salt-induced stress corrosion cracking. See *id*. at 77. It also raises a concern about the use of high burnup fuel. *Id*. But Pilgrim Watch does not provide a supported argument challenging the application linked to these concerns.

<sup>&</sup>lt;sup>126</sup> In its reply, Pilgrim Watch states that it "does not dispute" that the license transfer application and the PSDAR do not "specifically describe the Pilgrim site as 'clean." *See Pilgrim Watch Reply to Applicants' Answer Opposing Pilgrim Watch Petition for Leave to Intervene and Hearing Request* (Apr. 1, 2019), at 15 (PW Reply to Applicants). Pilgrim Watch goes on to claim that the application, cost estimate, and PSDAR do not justify an assumption that there is "no significant contamination." *See id.* (citing DCE at 22). To the extent that Pilgrim Watch is introducing new claims in its reply brief, Commission practice generally does not allow entirely new arguments to be presented in a reply. *See, e.g., Louisiana Energy Services, L.P.* (National

Holtec based its decommissioning cost estimate on its review of the historical contamination event records maintained under 10 C.F.R. § 50.75(g).<sup>127</sup> Holtec concluded that these events were well documented and the cleanup efforts following the specific recorded events "were effective such that no significant contamination remained following cleanup operations."<sup>128</sup> But that is not an assertion that no further cleanup will be necessary during the decommissioning process at the particular areas where a recorded incident of contamination took place. Nor is it an assertion that other areas at the facility do not have contamination. In its decommissioning cost estimate, Holtec states that it plans bulk removal of large contaminated components and that its estimate includes a conservative estimate of contaminated soil that will need to be removed, packaged, shipped, and disposed of as low level or exempt waste..<sup>129</sup> In addition, regarding non-radiological site restoration, Holtec states it will need to remove asbestos

<sup>128</sup> DCE at 23.

<sup>129</sup> *Id.* 

Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004). Regardless, Pilgrim Watch does not raise a litigable issue here. Pilgrim Watch claims that while it will "assume that, to some unknown extent, Holtec may have reviewed some 50.75(g) records and received some data and historical information from Entergy . . . even Holtec recognized that what it had done was not enough to know what contamination is actually on site" because it planned to conduct site characterization activities to identify, categorize, and quantify radiological, regulated, and hazardous wastes. See PW Reply to Applicants at 15-16. In essence, Pilgrim Watch merely reiterates its claim that because the cost estimate was not based on a full site characterization, Holtec cannot now know the true decommissioning costs. See id. at 16. But at this stage we do not require the cost estimate to be confirmed by a site characterization.

<sup>&</sup>lt;sup>127</sup> Pilgrim Watch argues that Holtec "admits" that site characterization is necessary to supplement the historic plant records on which Holtec bases its cleanup estimates. PW Petition at 32-33. The application does not specifically describe the contents of historical plant records, and therefore Pilgrim Watch may not know specific historical data to the extent that such data are not publicly available. But the NRC has not required licensees to include summaries of this historical data in their site-specific cost estimates. Moreover, to the extent that Pilgrim Watch found it needed additional information to review the application, the Hearing Opportunity Notice provided steps potential intervenors should take to access material, non-public information. Hearing Opportunity Notice, 84 Fed. Reg. at 819. Pilgrim Watch did not request access to non-public information in this proceeding.

containing material and hazardous and universal waste.<sup>130</sup> Pilgrim Watch does not address or otherwise challenge Holtec's estimated \$40 million estimate for non-radiological site restoration.

Pilgrim Watch also argues that no site characterization has been performed to identify, categorize, and quantify radiological and non-radiological contamination..<sup>131</sup> To the extent that Pilgrim Watch disputes Holtec's cost estimate because it is not based on a completed site characterization, Pilgrim Watch does not raise an admissible, genuine material dispute with the application. We do not require that a site characterization be performed at this stage, and we therefore do not require that the current site-specific decommissioning cost estimate be based on or confirmed by a site characterization.

Our regulations require a site characterization when a licensee submits its license termination plan. The license termination plan must be submitted at least two years before the date of license termination. Among other items, it must include a site characterization and an updated site-specific decommissioning cost estimate for the remaining decommissioning activities.<sup>132</sup> Holtec states that it plans to submit its license termination plan about two years prior to the year in which Holtec expects that the site will be released (except for the ISFSI portion). This license termination plan review, which will be subject to a hearing opportunity, will therefore encompass the site characterization and the updated decommissioning cost estimate.

To the extent that Pilgrim Watch challenges the adequacy or accuracy of Holtec's cost estimates because a site characterization has not yet been completed, Pilgrim Watch impermissibly challenges our regulations.<sup>133</sup> Because we do not require a site characterization

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<sup>&</sup>lt;sup>130</sup> See id. at 16, 23; HDI PSDAR at 11; see also DCE at 49-50 (listing site restoration costs).

<sup>&</sup>lt;sup>131</sup> See PW Petition at 31-54.

<sup>&</sup>lt;sup>132</sup> See 10 C.F.R. § 50.82(a)(9)(ii)(A), (F).

<sup>&</sup>lt;sup>133</sup> See id. § 2.335(a).

at this point, we likewise do not require Holtec's current cost estimates to be based on verified quantities, types, and locations of contamination.<sup>134</sup>

Holtec has indicated that performing the site characterization, an iterative process, is one of its first tasks upon assuming the ownership and control of the site. Accordingly, we expect that Holtec's decommissioning cost estimate will be updated as warranted based on the results of the site characterization that Holtec is performing this year.

As discussed above, the licensee must provide every year in the financial assurance status report an estimate of the cost to complete decommissioning and the decommissioning criteria on which the estimate is based..<sup>135</sup> NRC guidance on decommissioning cost estimates specifically addresses the need to adjust the decommissioning cost estimate to account for "updated information about the facility conditions, such as larger levels of contamination than anticipated.".<sup>136</sup> The NRC also expects that the cost estimate will be adjusted annually to account for inflation. The cost estimate will also be updated to account for technological or plant status changes, including "recent developments in decontamination, waste processing and disposal, or cutting equipment and other technology; . . . updated waste disposal conditions; updated residual radioactivity limits; and experience gained from the actual decommissioning of similar facilities.".<sup>137</sup>

<sup>&</sup>lt;sup>134</sup> NRC decommissioning cost estimates are required at different stages: (1) initial cost estimates at the operating license stage may be based on the NRC's generic minimum formula found in 10 C.F.R. § 50.75(c) and must be adjusted annually; (2) a preliminary decommissioning cost estimate must be provided at or about five years prior to the projected end of operations, pursuant to § 50.75(f)(3); (3) a site-specific decommissioning cost estimate must be provided within two years following permanent cessation of operations, pursuant to § 50.82(a)(4)(i) (provided in the PSDAR) and § 50.82(a)(8)(iii); and (4) an updated decommissioning cost estimate of remaining costs must be provided in a license termination plan, pursuant to § 50.82(a)(9)(ii)(F). There are different expectations of the estimates to be provided under each of these stages.

<sup>&</sup>lt;sup>135</sup> See 10 C.F.R. § 50.82(a)(8)(v), (vi).

<sup>&</sup>lt;sup>136</sup> Regulatory Guide 1.159 at 12.

<sup>&</sup>lt;sup>137</sup> *Id*.

In sum, while the NRC must be satisfied that an applicant has demonstrated financial qualification to obtain an NRC license, annual monitoring of the decommissioning and spent fuel management funding ensures that projected funding will continue to remain sufficient to cover decommissioning and spent fuel management costs. Therefore, Pilgrim Watch's argument that the cost estimates are deficient because the actual amounts of contamination will not be known until a site characterization is completed does not raise a genuine material dispute with the application.

#### j. Claims of Existing Site Contamination

To the extent that Pilgrim Watch suggests that there is current contamination that will cause decommissioning activities to have environmental impacts exceeding those described in relevant environmental impact statements, Pilgrim Watch does not support its arguments and these claims fall beyond the scope of this license transfer proceeding. Similarly, to the extent that Pilgrim Watch claims that relevant environmental impact statements contain inaccurate information on site conditions, Pilgrim Watch does not support its claims and such claims likewise fall beyond the scope of this proceeding.<sup>138</sup>

Pilgrim Watch claims that the "cost of decontaminating and restoring the Pilgrim site will be more, probably far more than Holtec has estimated.".<sup>139</sup> It claims that "over the years, Pilgrim has buried contaminated material on site and has had many leaks and releases.".<sup>140</sup> In support,

<sup>&</sup>lt;sup>138</sup> See PW Petition at 33-34.

<sup>&</sup>lt;sup>139</sup> *Id.* at 35.

<sup>&</sup>lt;sup>140</sup> *Id.* at 36. Pilgrim Watch states that an environmental monitoring report issued in 1983 indicated excessively high readings of Cs-137 at two offsite locations. *See* PW Petition at 39-40. But the report also concluded that it was "highly unlikely" that the Pilgrim facility was the cause of the Cs-137 readings, which were over 1,000,000 times what would be expected—at a residence located over ten miles away from the Pilgrim plant. Ultimately, the report found that the absence of Cs-134 and the unusual reading indicated that atmospheric fallout from weapons testing may have been the primary cause of elevated cesium levels. *See* PW Petition, Ex. 3, Pilgrim Nuclear Power Station, Environmental Radiation Monitoring Program, at 3-68, 3-69, 3-80.

it refers to multiple asserted events, results of surveys, and NRC inspection results..<sup>141</sup> But it does not link these cited items to the license transfer application. It does not explain how the historic reports or events that it references have significance today; what that significance is (e.g., a particular level of residual radioactivity likely to exist today at levels that exceed standards); or how the information challenges a specific aspect of the application (e.g., estimated remediation costs that call into question Holtec's cost estimates). Pilgrim Watch does not articulate a genuine dispute with Holtec's site-specific decommissioning cost estimate or the site restoration cost estimate..<sup>142</sup>

Pilgrim Watch claims that there has not been an adequate program at Pilgrim for

inspecting buried pipes and tanks, and it suggests that there is contamination around the buried

pipes and tanks that may not be accounted for in the decommissioning cost estimate. This

claim is unsupported.<sup>143</sup>

In addition, Pilgrim Watch notes, and Holtec does not dispute, that groundwater

monitoring at Pilgrim has shown elevated levels of radionuclides, including tritium.<sup>144</sup> But again,

<sup>&</sup>lt;sup>141</sup> See PW Petition at 36-54.

<sup>&</sup>lt;sup>142</sup> See id. at 36-44. For example, Pilgrim Watch references a 1988 article in the Boston Globe, which stated that a 5,000 cubic feet pile of dirt near Pilgrim contained Cs-134, Cs-137, and Co-60. But the article states that this pile of dirt near the Pilgrim parking lot did not have levels of radioactivity exceeding federal standards. *See* "Radioactivity Detected in Dirt Pile Near Pilgrim," by Larry Tye, Boston Globe (Jan. 21, 1988), at 29. Nothing in the article indicates that the pile of dirt posed any public health and safety or environmental concern, even in 1988.

<sup>&</sup>lt;sup>143</sup> See PW Petition at 42-44. The adequacy of Entergy's aging management program for buried pipes and tanks was the subject of an evidentiary hearing at the time the Pilgrim operating license was renewed. The Board found in favor of the applicant; we declined review. *Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-08-22, 68 NRC 590, 593 (2008), *pet. for review denied*, CLI-14-10, 71 NRC 449, 477 (2010).

<sup>&</sup>lt;sup>144</sup> See PW Petition at 44-48. Pilgrim Watch's citations to the NRC Liquid Radioactive Release Lessons Learned Task Force Final Report do not raise a dispute with the Holtec application. *See id.* at 50-52, 103 (citing "NRC Liquid Radioactive Release Lessons Learned Task Force, Final Report" (2006) (ML062650312)). The report proposed improvements to radiological effluent and environmental monitoring, which led to expanded monitoring at nuclear power plant

Pilgrim Watch provides no expert opinion or other factual support indicating that there is significant remaining contamination which will require remediation at a cost that may make a material difference to Holtec's financial qualification. One of Pilgrim Watch's cited references is an updated report by the Commonwealth's Bureau of Environmental Health on tritium in groundwater at Pilgrim covering the months July-December 2018.<sup>145</sup> The report notes that out of twenty-three routinely sampled groundwater wells, in all wells but one (MW-219) tritium levels were below the EPA drinking water standard.<sup>146</sup> The report states that Entergy identified the source of tritium in MW-219 and installed a containment system and that levels of tritium in that well had stabilized at 1,000 pCi/L (well below the EPA drinking water standard of 20,000 pCi/L).<sup>147</sup> This report, on its face, does not support Pilgrim Watch's claims. And Pilgrim Watch does not address how this or other reports it references call into question the plausibility of Holtec's decommissioning cost estimate or otherwise raise a genuine material dispute with the application.

Pilgrim Watch also does not support its claim that there has been "hazardous waste dumping" at Pilgrim—that barrels of chemical waste were shipped from New Jersey and buried along Pilgrim's access road..<sup>148</sup> Indeed, Pilgrim Watch states that the Commonwealth did not

facilities including at Pilgrim. The recommendations and conclusions of the 2006 report do not suggest that current radiological effluent and environmental monitoring is unreliable.

<sup>&</sup>lt;sup>145</sup> See PW Petition at 44 n.38 (with link to state groundwater monitoring reports); "Update of the Tritium in Groundwater Investigation at Pilgrim Nuclear Power Station, Plymouth, MA" (July-December 2018) (Tritium Investigation Update).

<sup>&</sup>lt;sup>146</sup> See Tritium Investigation Update at 2.

<sup>&</sup>lt;sup>147</sup> See *id.* at 3.

<sup>&</sup>lt;sup>148</sup> See PW Petition at 52-53 & nn.55-56. In support, Pilgrim Watch cites to a paper by the Jones River Watershed Association (PW Exhibit 4, ML19052A182, at 34) that merely states that "sources have reported" burials of hazardous waste and a 2013 Pilgrim Coalition newsletter, in which an individual stated that he had "tried to uncover chemical wastes . . . buried near the plant."

investigate such claims of buried hazardous wastes because no evidence of buried wastes had been identified on which the Commonwealth could rely to pursue an investigation..<sup>149</sup>

Further, Pilgrim Watch does not support its claim that the decommissioning cost estimate is inadequate because it fails to include the cost of an "adequate study to locate sites where potential masses of contaminated material susceptible to ignition might accumulate during decommissioning and the costs of forestalling a fire by removing or limiting heat, oxygen, and/or fuel.".<sup>150</sup> Holtec notes that it has onsite property damage insurance and offsite nuclear liability insurance and that its plant deactivation activities will include removing combustibles and chemicals to permit fire protection system modifications..<sup>151</sup> Pilgrim Watch also provides no expert opinion or factual support for its claims that Holtec failed to consider what it asserts are likely increased decommissioning costs due to climate change..<sup>152</sup> And it does not adequately support its claim that climate change impacts would likely cause a significant increase in decommissioning costs during the years 2019-27 or overall ISFSI decommissioning costs.

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<sup>&</sup>lt;sup>149</sup> See PW Petition at 53.

<sup>&</sup>lt;sup>150</sup> *Id.* at 59.

<sup>&</sup>lt;sup>151</sup> See Applicants Answer to PW at 53.

<sup>&</sup>lt;sup>152</sup> See PW Petition at 60-61.

### k. ISFSI Decommissioning

Pilgrim Watch also challenges the adequacy of Holtec's funding for the decommissioning of the ISFSI. Pilgrim Watch claims that Holtec's cash flow analysis does not take into account Holtec's estimated ISFSI decommissioning cost of \$4.2 million..<sup>153</sup> But while the cash flow analysis table does not display a separate column for ISFSI decommissioning, Holtec incorporated the estimated ISFSI decommissioning costs into its calculations by allocating portions of the overall ISFSI decommissioning costs into the separate categories of license termination, spent fuel management, and site restoration activities..<sup>154</sup> The decommissioning costs into separate categories (e.g., removal costs, LLRW disposal costs, license termination, spent fuel, site restoration)..<sup>155</sup> Pilgrim Watch does not address or challenge these stated costs.

Pilgrim Watch additionally claims that if decommissioning costs exceed inflation by 4% every year, then by its own calculations the ISFSI decommissioning cost will be \$24 million more than Holtec projects.<sup>156</sup> But Pilgrim Watch does not support this cost escalation claim regarding ISFSI decommissioning. In any event, Holtec must submit to the NRC an ISFSI decommissioning funding plan at least every three years with adjustments as necessary to account for changes in costs..<sup>157</sup> And because Holtec is relying on the decommissioning trust fund to pay for the ISFSI decommissioning costs, it will also need to provide this information in an annual financial status report on decommissioning..<sup>158</sup> That report is required to indicate the costs incurred the previous year, the remaining projected costs to complete the

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<sup>&</sup>lt;sup>153</sup> See id. at 80-81.

<sup>&</sup>lt;sup>154</sup> See DCE at 28-30.

<sup>&</sup>lt;sup>155</sup> See *id.* at 54.

<sup>&</sup>lt;sup>156</sup> See PW Petition at 81.

<sup>&</sup>lt;sup>157</sup> See 10 C.F.R. § 72.30(b)-(c).

<sup>&</sup>lt;sup>158</sup> See *id*. § 50.82(a)(8)(vii).

decommissioning, and the amount remaining in the trust fund. If there is a significant increase in projected ISFSI decommissioning costs, Holtec would need to provide additional financial assurance in the status report to cover those costs.

Pilgrim Watch also raises an unsupported challenge to Holtec's assumption that the ISFSI pads will not be contaminated..<sup>159</sup> But it asserts no factual basis or expert opinion challenging Holtec's assumption. Holtec states that its cost estimate assumes that some of the inner steel liners and concrete overpacks will contain low levels of neutron-induced residual radioactivity that would necessitate remediation at the time of decommissioning..<sup>160</sup> But Pilgrim Watch provided no support for its assertion that contamination of underlying pads would be expected, particularly given that the canisters are stored in steel-lined concrete overpacks...<sup>161</sup> Because Pilgrim Watch did not support its claim, we do not consider it further. Holtec's assumption will nonetheless need to be confirmed by verification surveys, as it indicates in its estimate...<sup>162</sup> In sum, Pilgrim Watch has not provided a supported admissible dispute challenging the estimated ISFSI decommissioning.

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<sup>&</sup>lt;sup>159</sup> See PW Petition at 80 (citing DCE at 25).

<sup>&</sup>lt;sup>160</sup> See Applicants Answer to PW at 60 (citing DCE at 25) (as an allowance nine of the sixty-one overpacks are assumed to contain residual radioactivity).

<sup>&</sup>lt;sup>161</sup> *Id*.

<sup>&</sup>lt;sup>162</sup> See DCE at 25.

#### *I.* Claims Relating to the PSDAR

Many of Pilgrim Watch's arguments suggest that this proceeding will approve HDI's PSDAR and thereby will authorize the decommissioning activities described in the report..<sup>163</sup> But the proposed license transfer does not permit Holtec Pilgrim and HDI to perform any decommissioning or spent fuel management activity not already authorized by the Pilgrim licenses. Similarly, neither Holtec Pilgrim nor HDI may undertake any decommissioning activities that result in any significant environmental impacts that have not been previously reviewed..<sup>164</sup>

As we describe further below, the NRC does not approve a PSDAR, and most of the information in a PSDAR falls outside the scope of a license transfer proceeding. The Staff examined the 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. . . and to engage in the proposed maintenance and decommissioning activities." <sup>165</sup> In this sense, the site-specific decommissioning cost estimate and the associated decommissioning schedule must necessarily be reviewed as part of the determination concerning Holtec's financial qualification. <sup>166</sup> But a license transfer review does not itself involve any consideration of the potential environmental impacts of decommissioning activities.

As part of our oversight of decommissioning, the NRC requires a licensee to submit a PSDAR. Before or within two years following permanent cessation of operations, a licensee

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<sup>&</sup>lt;sup>163</sup> See, e.g., PW Petition at 18-19, 129.

<sup>&</sup>lt;sup>164</sup> See 10 C.F.R. § 50.82(a)(6)(ii).

<sup>&</sup>lt;sup>165</sup> SER at 3.

<sup>&</sup>lt;sup>166</sup> See *id.* at 9 n.1 (noting that the NRC does not approve a PSDAR and that the Staff relied on the HDI PSDAR for the site-specific decommissioning cost estimate, and as a general reference for HDI's decommissioning plans).

must submit a PSDAR to the NRC.<sup>167</sup> The PSDAR must contain (a) a description of the planned decommissioning activities and a schedule for their accomplishment; (b) the reasons for the licensee's conclusion that the specified decommissioning activities will be bounded by prior environmental impact statements; and (c) a site-specific decommissioning cost estimate.

The PSDAR's purpose is to provide a "general overview for the public and the NRC of the licensee's proposed decommissioning activities." <sup>168</sup> The PSDAR also informs the NRC Staff of the licensee's decommissioning schedule, allowing the Staff to plan for inspections and other decommissioning oversight activities. The NRC will provide notice of a PSDAR and an opportunity for public comment, and it will also hold a public meeting on the PSDAR. <sup>169</sup>

But the NRC does not approve a PSDAR, nor does a PSDAR amend a license. That is because a PSDAR does not authorize a licensee to perform any decommissioning activity that is not already permitted under the license or would result in significant environmental impacts not already reviewed...<sup>170</sup> A licensee therefore may begin to perform major decommissioning activities consistent with its PSDAR ninety days after the NRC has received the PSDAR...<sup>171</sup>

NRC regulations expressly prohibit a licensee from performing any decommissioning activity that results in significant impacts "not previously reviewed.".<sup>172</sup> The NRC has evaluated potential environmental impacts of decommissioning nuclear power reactors in a

<sup>172</sup> 10 C.F.R. § 50.82(a)(6)(ii).

<sup>&</sup>lt;sup>167</sup> 10 C.F.R. § 50.82(a)(4)(i) (also providing for a copy to the affected state(s)).

<sup>&</sup>lt;sup>168</sup> *See* Decommissioning of Nuclear Power Reactors, Final Rule, 61 Fed. Reg. 39,278, 39,281 (July 29, 1996) (Decommissioning Rule).

<sup>&</sup>lt;sup>169</sup> 10 C.F.R. § 50.82(a)(4)(ii).

<sup>&</sup>lt;sup>170</sup> See id. § 50.82(a)(6)(ii).

<sup>&</sup>lt;sup>171</sup> *Id.* § 50.82(a)(5). In issuing the PSDAR regulations, the NRC explained that initial decommissioning activities such as dismantlement are "not significantly different from routine operational activities such as replacement or refurbishment." *See* Decommissioning Rule, 61 Fed. Reg. at 39,284. The NRC therefore concluded that "these decommissioning activities do not present significant safety issues for which an NRC decision would be warranted." *Id.* 

comprehensive GEIS.<sup>173</sup> The "GEIS reflects the NRC's determination that decommissioning is not itself a major federal action" and "it serves 'to establish an envelope of environmental impacts associated with decommissioning activities."<sup>174</sup> The NRC's Decommissioning GEIS addresses the potential impacts associated with both the SAFSTOR and DECON decommissioning approaches (as well as a combination of both).

In a PSDAR, a licensee must provide its reasons for concluding that the environmental impacts associated with planned decommissioning activities are bounded by previously issued, relevant site-specific or generic environmental impact statements..<sup>175</sup> If a licensee contemplates performing an activity with impacts not enveloped by previous environmental analyses, the licensee must submit a license amendment request, together with a supplemental environmental report evaluating the additional impacts..<sup>176</sup> Such a license amendment request would be subject to a hearing opportunity.

m. Miscellaneous Claims

Finally, as part of Contention I, Pilgrim Watch raises several additional claims that do not plausibly relate to the question of Holtec's financial condition, that are outside the scope of this license transfer proceeding, and that do not articulate admissible issues. These include (1) an apparent challenge to the 2002 Decommissioning GEIS's consideration of risk coefficients per

<sup>&</sup>lt;sup>173</sup> See Decommissioning GEIS.

<sup>&</sup>lt;sup>174</sup> See Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99, 123 (2016) (quoting Decommissioning GEIS at 1-1).

<sup>&</sup>lt;sup>175</sup> 10 C.F.R. § 50.82(a)(4)(i).

<sup>&</sup>lt;sup>176</sup> Vermont Yankee, CLI-16-17, 84 NRC at 123-24; Decommissioning GEIS at 1-11, 2-3; Decommissioning Rule, 61 Fed. Reg. at 38,283, 39,286. NRC regulations also prohibit a licensee from performing any decommissioning activities that foreclose release of the site for unrestricted use or result in a loss of reasonable assurance that adequate funds will be available for decommissioning. *See* 10 C.F.R. § 50.82(a)(6).

unit dose; <sup>177</sup> (2) a claim that Holtec assumes incorrect "socioeconomic[] costs of decommissioning; <sup>178</sup> (3) an environmental justice claim; <sup>179</sup> and (4) a claim that the impacts of radiological accidents are not bounded by the previously issued GEIS. <sup>180</sup> We therefore conclude that Pilgrim Watch's Contention I is inadmissible.

<sup>178</sup> See PW Petition at 56-57. Providing funding to pay for local emergency planning is not part of the site-specific decommissioning cost estimate.

<sup>179</sup> See *id.* at 65.

<sup>&</sup>lt;sup>177</sup> Pilgrim Watch claims that Holtec's discussion of potential radiological dose to the public and workers is based on "an outdated GEIS" using outdated risk coefficients per unit dose. See PW Petition at 54-55. Pilgrim Watch does not suggest how any of its claims call into question Holtec's decommissioning cost estimate. Holtec states that even apart from Pilgrim Watch's claim falling outside the scope of this proceeding, the 2002 Decommissioning GEIS used risk coefficients from the BEIR V report, which Pilgrim Watch did not address, and the 2013 GEIS on license renewal "discusses current risk coefficients" based on the BEIR VII report, and the difference is "within the margin of uncertainty associated with these estimates." See Applicants Answer to PW at 26 n.84 (citing "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (Final Report), NUREG-1437, rev. 1 (June 2013)).

<sup>&</sup>lt;sup>180</sup> See *id.* at 66-80. Pilgrim Watch claims that Holtec's cost estimates "ignore" the costs of mitigating radiological accidents. *See id.* at 66. But Holtec will carry onsite property damage insurance and offsite nuclear liability insurance in coverage amounts approved by the NRC. Moreover, although the various claims of accident risk and accident impacts are outside of the scope of this transfer proceeding, we note that these claims do not even appear relevant to Holtec's PSDAR, which, pursuant to NRC regulations, addresses the environmental impacts associated with "site-specific decommissioning activities." *See* 10 C.F.R. § 50.82(a)(4)(i). Most of Pilgrim Watch's arguments raise concerns about the potential environmental impacts of spent fuel storage in a pool or ISFSI, not the potential environmental impacts of decommissioning activities. *See* PW Petition at 66-80.

### 2. Pilgrim Watch's Contention II

In Contention II, Pilgrim Watch argues that the license transfer request requires a NEPA environmental analysis and that the application is deficient for not including an ER;.<sup>181</sup> that the no significant hazards finding in 10 C.F.R. § 2.1315 does not apply;.<sup>182</sup> the categorical exclusion in 10 C.F.R. § 51.22(c)(21) does not apply; .<sup>183</sup> and that the environmental impacts of decommissioning are not bounded by previously issued environmental impact statements..<sup>184</sup>

Among its arguments calling for a NEPA analysis, Pilgrim Watch states that a lack of sufficient funds to carry out decommissioning "could result in significant adverse health, safety, and environmental impacts" and further "would increase the need for an updated site assessment and environmental impact statement."<sup>185</sup> We find that the categorical exclusion applies to the license transfer and associated amendment and that therefore no additional NEPA analysis is required.

As an initial matter, Pilgrim Watch references 10 C.F.R. § 51.53(d) as support for its argument that the license transfer application needed to include an environmental report..<sup>186</sup> Section 51.53(d) refers to an applicant seeking a license amendment "approving a license termination plan or decommissioning plan under § 50.82." Holtec seeks neither of these approvals at this time..<sup>187</sup> Following revisions to the decommissioning regulations in 1996, power reactor licensees are "no longer . . . required to have an approved decommissioning

<sup>187</sup> Section 51.53(d) also applies to applicants for a license amendment authorizing decommissioning activities, which this proceeding likewise does not involve.

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<sup>&</sup>lt;sup>181</sup> See PW Petition at 82.

<sup>&</sup>lt;sup>182</sup> See *id.* at 87-89.

<sup>&</sup>lt;sup>183</sup> See id. at 89-90.

<sup>&</sup>lt;sup>184</sup> See id. at 87-123.

<sup>&</sup>lt;sup>185</sup> See id. at 123-25.

<sup>&</sup>lt;sup>186</sup> See id. at 82, 85.

plan" before undertaking major decommissioning activities.<sup>188</sup> The revised rules instead instituted the requirement that licensees provide a PSDAR.<sup>189</sup>

Pilgrim Watch also references 10 C.F.R. § 51.20(b)(9), which requires an environmental impact statement in proceedings for away-from-reactor ISFSIs licensed pursuant to 10 C.F.R. Part 72..<sup>190</sup> But no such licensing action is involved in this proceeding.

a. Categorical Exclusion for License Transfers and Associated Amendments of License

The NRC has determined, by rule, that certain categories of licensing actions do not individually or collectively have a significant effect on the environment. Except in the case of special circumstances as determined by the Commission, no environmental assessment or environmental impact statement is required for these categories of licensing actions, which are categorically excluded from the need to prepare an NRC analysis under NEPA.<sup>191</sup> A categorical exclusion "does not indicate the absence of an environmental review, but rather, that the agency has established a sufficient administrative record to show that the subject actions do not, individually or cumulatively, have a significant effect on the human environment.".<sup>192</sup>

After performing numerous environmental assessments for license transfer applications, which demonstrated no significant environmental effects linked to the transfers, the NRC determined that license transfers do not significantly affect the environment.<sup>193</sup> Pursuant to 10 C.F.R. § 51.22(c)(21), the NRC categorically excluded license transfer actions from the need to perform further environmental analysis. As the NRC explained in issuing the categorical

<sup>&</sup>lt;sup>188</sup> *See* Decommissioning Rule, 61 Fed. Reg. at 39,279. The reference in the regulation to a "decommissioning plan" relates to materials licensees. *See id.* at 39,290.

<sup>&</sup>lt;sup>189</sup> See id. at 39,281; 10 C.F.R. § 50.82(a)(4).

<sup>&</sup>lt;sup>190</sup> See PW Petition at 85.

<sup>&</sup>lt;sup>191</sup> See 10 C.F.R. § 51.22(b), (c).

<sup>&</sup>lt;sup>192</sup> Categorical Exclusions from Environmental Review, Final Rule, 75 Fed. Reg. 20,248, 20,251 (Apr. 19, 2010).

<sup>&</sup>lt;sup>193</sup> See Streamlined Hearing Process, 63 Fed. Reg. at 66,728.

exclusion rule, license transfers do not "in and of themselves permit the licensee to operate the facility" in a different manner than that permitted under the existing licenses. Therefore a license transfer would not usually present environmental impacts any different from those already considered in relevant generic or site-specific NEPA analyses..<sup>194</sup> Consequently, unless we determine that special circumstances are present, an environmental assessment or environmental impact statement is not required for approvals of direct or indirect transfers of any license issued by the NRC and for "any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license.".<sup>195</sup> Here, the Staff concluded that the license transfer action and the associated license amendment meet the criteria of the NRC's categorical exclusion rule in 10 C.F.R. § 51.22..<sup>196</sup>

# b. Deletion of License Condition J (4)

Pilgrim Watch argues that Holtec erroneously relies on the generic determination that a license amendment that "does no more than conform the license to reflect the transfer action[] involves . . . no significant hazards consideration" to avoid performing an environmental analysis of the transfer..<sup>197</sup> It argues that the deletion of license conditions relating to parent company guarantees does more than "conform the license" to reflect the transfer..<sup>198</sup> As an initial matter, Pilgrim Watch mistakes the significance of the "no significant hazards consideration" finding. Section 2.1315 allowed the Staff to issue the license on an immediately

<sup>&</sup>lt;sup>194</sup> See id.

<sup>&</sup>lt;sup>195</sup> 10 C.F.R. § 51.22(c)(21).

<sup>&</sup>lt;sup>196</sup> See SER at 33 (mis-numbered as page 7).

<sup>&</sup>lt;sup>197</sup> PW Petition at 87-88; *see* 10 C.F.R. § 2.1315.

<sup>&</sup>lt;sup>198</sup> PW Petition at 88.

effective basis, but Holtec's justification for not submitting an environmental report with its application was the categorical exclusion found in 10 C.F.R. 51.22(c)(21).

The NRC imposed the parent company guarantee, (License Condition J (4)) when it approved the transfer of the Pilgrim operating license from the Boston Edison Company to ENGC in 1999.<sup>199</sup> As part of the previous transfer, Entergy International, a wholly owned subsidiary of Entergy Corporation, offered contingency funding to ENGC via a specific Inter-Company Credit Agreement, which the Staff reviewed at the time of the transfer..<sup>200</sup> Through the license transfer currently before us, Entergy International no longer will be a corporate affiliate of the company that was called ENGC and now is renamed Holtec Pilgrim..<sup>201</sup>

Holtec's proffered financial qualification demonstration relies only on the prepayment method of financial assurance, based on the funding accumulated in the trust fund estimated decommissioning cost. Had the Staff concluded that the trust fund by itself is insufficient, the Staff might have required additional financial assurance. Or alternatively, the Staff might have denied, limited, or otherwise conditioned the exemption. But the specific contingency funding provision is no longer an available financial assurance option. The proposed deletion of License Condition J (4) therefore was necessary to reflect the new financial qualification showing provided for applicants Holtec Pilgrim and HDI.

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<sup>&</sup>lt;sup>199</sup> License Condition J (4) required ENGC to "have access to a contingency fund of not less than fifty million dollars." *See* License Condition J (4).

<sup>&</sup>lt;sup>200</sup> See Safety Evaluation for the Proposed Transfer of Operating License and Materials License for Pilgrim Nuclear Power Station to Entergy Nuclear Generation Co. (Apr. 29, 1999), at 4, 9 (SER for 1999 License Transfer), Encl. 3 to Letter from Alan B. Wang, NRC, to Theodore A. Sullivan, Boston Edison Co., and Jerry W. Yelverton, ENGC (Apr. 29, 2019) (ML011910099) (noting that the contingency funding would be available as necessary to cover operating costs if projected revenues were temporarily lost due to an outage).

<sup>&</sup>lt;sup>201</sup> As the Applicants note, through the transfer sale, Entergy is "extinguishing its interests in and responsibility for Pilgrim," and therefore no Entergy-related support agreement would continue following the sale. See Applicants Answer to Commonwealth at 17 & n.62. No such support is offered or relied on as part of the equity purchase and sale agreement or likewise as part of the license transfer application.

Accordingly, the license amendment associated with this transfer merely effectuated an approved transfer. In issuing the rule governing the categorical exclusion for license transfers the NRC stated that "amendments effectuating an approved transfer present no safety questions" and further that the NRC had "determined that a new categorical exclusion should be added" for license transfer actions and license amendments that effectuate the approved transfers..<sup>202</sup>

In contrast, the NRC made clear what type of license amendment requests would not fall within the categorical exclusion—"any request for an amendment that would directly affect the actual operation of a facility.".<sup>203</sup> The NRC observed based on its extensive experience with such matters, the typical license transfer review "consists largely of assuring that the ultimately licensed entity has the capability to meet financial qualification and decommissioning funding aspects of NRC regulations," and "[t]hese financial capabilities . . . have *no direct*" impact on the requirements governing a facility's operations..<sup>204</sup> But those "[a]mendments that directly affect the actual operation of a facility" remain subject to the environmental review requirements in 10 C.F.R. Part 51..<sup>205</sup>

Here, the deletion of License Condition J (4) and of the three other financial license conditions imposed at the time of the 1999 license transfer do not directly affect the operation of the Pilgrim facility. Nor does deleting these financial conditions expand the activities authorized under the license. Therefore, we find that these deletions were administrative in nature and fall within the scope of the categorical exclusion in § 51.22(c)(21)..<sup>206</sup>

<sup>205</sup> See *id.* at 66,728.

<sup>&</sup>lt;sup>202</sup> See Streamlined Hearing Process, 63 Fed. Reg. at 66,728.

<sup>&</sup>lt;sup>203</sup> Id.

<sup>&</sup>lt;sup>204</sup> See id. at 66,722 (emphasis added).

 $<sup>^{206}</sup>$  The three other deleted financial conditions, License Conditions J (1), J (2), and J (3) pertained to specific actions to be taken at the time of the 1999 transfer and are on their face

In sum, a license transfer applicant's reliance on different financial assurance methods than a current licensee would not normally present the potential for any new and significant risk of environmental harm. All applicants must demonstrate adequate financial qualification to take over the ownership and/or operation of a facility. The categorical exclusion rule applies even when an applicant does not rely on the same methods of showing financial qualification on which the current licensee relied. By deleting the four license conditions, the license amendment effectuated the approved transfer and thus falls within the scope of 10 C.F.R. § 51.22(c)(21).

## c. Categorical Exclusion for Holtec's Application and Exemption Request

Pilgrim Watch further argues that the categorical exclusion generally applicable to license transfers should not apply to this proceeding. Pilgrim Watch raises various arguments similar to those it raised in Contention I, in which it argued that the site is contaminated and Holtec does not know the extent of the contamination and therefore is not prepared to deal with it..<sup>207</sup> But, as we discussed above, these are issues associated with the future decommissioning, not the transfer of the license, and are outside the scope of this proceeding.

Specifically, Pilgrim Watch challenges HDI's conclusion in its PSDAR that the environmental impacts associated with the planned decommissioning activities are "less than and bounded by" previously issued environmental impact statements.<sup>208</sup> Pilgrim Watch argues that the impacts are not bounded by earlier environmental analyses because those analyses

inapplicable here. See Application, Attach. A, "Renewed Facility Operating License (Changes)," at 4; see also SER for 1999 License Transfer at 11-12.

<sup>&</sup>lt;sup>207</sup> PW Petition at 91, 94-130.

<sup>&</sup>lt;sup>208</sup> *Id.* at 91; *see also* HDI PSDAR at 20; *see also id.* at 20-37 (providing reasons for conclusion).

either omitted crucial information or there is new information "resulting from events that occurred after the previous [environmental impact statements] were issued."<sup>209</sup>

But if Pilgrim Watch has grounds to believe that the impacts of planned decommissioning, site restoration, and spent fuel management activities exceed those previously reviewed, its recourse is a petition for enforcement action to address HDI's representations in the Pilgrim PSDAR..<sup>210</sup> For the reasons described above, in this license transfer proceeding the NRC will not approve the PSDAR or authorize any of the decommissioning, spent fuel management, and site restoration activities outlined in it. Although the site-specific decommissioning cost estimate that Holtec Pilgrim and HDI attached to the PSDAR bears directly on the financial assurance findings that are required to approve the license transfer, the environmental impacts of the activities described in the PSDAR do not..<sup>211</sup> Pilgrim Watch's various challenges to the environmental conclusions in the PSDAR accordingly fall outside the scope of this proceeding.

Finally, Pilgrim Watch argues that the categorical exclusion does not apply because Pilgrim Watch has asked for an environmental assessment.<sup>212</sup> Pilgrim Watch points to the language in 10 C.F.R. § 51.22(b), which provides that environmental analyses are not required "[e]xcept in special circumstances as determined by the Commission upon its own initiative or upon request of any interested person." But the regulation simply allows an interested person to request that the Commission make the determination that "special circumstances" exist that warrant an exception to the categorical exclusion.<sup>213</sup> Pilgrim Watch's interpretation—that the

<sup>&</sup>lt;sup>209</sup> PW Petition at 91.

<sup>&</sup>lt;sup>210</sup> See 10 C.F.R. § 2.206; see also id. § 50.82(a)(4)(i), (6)(ii).

<sup>&</sup>lt;sup>211</sup> See HDI PSDAR at 20-37.

<sup>&</sup>lt;sup>212</sup> See PW Petition at 89-90.

<sup>&</sup>lt;sup>213</sup> See 10 C.F.R. § 51.22(b).

categorical exclusion would not apply any time a petitioner asks that it not apply—would circumvent the purpose of the regulation.

## **D.** Supplemental Motions

We also received several supplemental filings in support of the hearing requests. We address each briefly below.

# 1. New Decommissioning Activities Timeline

Pilgrim Watch filed a motion to supplement its hearing request based on Holtec's change in the project timeline..<sup>214</sup> But Pilgrim Watch does not provide expert or factual support indicating how the specific timeline change may materially impact the cash flow analysis or overall financial qualification demonstration..<sup>215</sup> There is no supported assertion of how the timeline change might affect Holtec's costs, for example. Further, potential increased costs due to delays in decommissioning commonly are addressed by the contingency added to decommissioning cost estimates, and Pilgrim Watch provides nothing to challenge the assumption that potential added costs from the timeline change would be covered by Holtec's contingency allowance. To trigger an adjudicatory hearing, it is insufficient merely to claim that changes in the timing and duration of decommissioning "plainly impact" whether Holtec has adequate funding and "whether the license transfer application should be granted or denied.".<sup>216</sup> Pilgrim Watch does not provide a supported challenge to Holtec's financial qualifications

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<sup>&</sup>lt;sup>214</sup> See Pilgrim Watch Motion to Supplement its February 20, 2019 Motion to Intervene and Request for Hearing, its April 1, 2019 Reply to Petitioners, and its May 3, 2019 Motion to Supplement (Nov. 25, 2019).

<sup>&</sup>lt;sup>215</sup> Because we do not allow Pilgrim Watch to incorporate the contentions, arguments, and evidence of another petitioner unless it has first proposed its own admissible contention, we do not consider the evidence the Commonwealth filed in support of a similar motion concerning Holtec's timeline change. *See Motion of the Commonwealth of Massachusetts to Amend its Petition with New Information* (Dec. 13, 2019).

<sup>&</sup>lt;sup>216</sup> See *id.* at 5-6.

demonstration, and we therefore find that Pilgrim Watch has not raised an admissible contention..<sup>217</sup>

### 2. Motion Relating to Holtec's Announcement Regarding Acquisition of Indian Point

Pilgrim Watch also filed a motion to supplement its hearing request with new information following a press release on April 16, 2019, by Entergy Corporation, in which Entergy stated its intention to sell Indian Point Units 1, 2, and 3 to Holtec.<sup>218</sup>

Pilgrim Watch articulates its concern that Holtec will be decommissioning not just the Pilgrim and Oyster Creek sites simultaneously but also the Indian Point site. Pilgrim Watch states that the news about the additional units at Indian Point exacerbates its concerns about Holtec's financial ability to decommission Pilgrim..<sup>219</sup> But Pilgrim Watch does not raise a supported dispute challenging Holtec's financial qualifications to be the owner and operator of Pilgrim.

Pilgrim Watch notes that the NRC Staff issued a Request for Additional Information (RAI) to Holtec, seeking more information to demonstrate that HDI's management and technical support organization will have sufficient resources (e.g., corporate structure, internal procedures, management and technical support organization staff capacities) to conduct licensed activities at both the Oyster Creek and Pilgrim sites.<sup>220</sup> But Pilgrim Watch's reference to the RAI does not raise an admissible challenge to the application. The Staff simply requested additional information regarding HDI's management and technical support organization, a

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 $<sup>^{217}</sup>$  Moreover, as a procedural matter, NRC regulations do not provide for motions to supplement a hearing request. Motions for leave to file new or amended contentions must be filed pursuant to 10 C.F.R. § 2.309(c)(1), which addresses the factors for filings submitted after the contention deadline.

<sup>&</sup>lt;sup>218</sup> See Pilgrim Watch Motion to Supplement its Motion to Intervene and Request for Hearing (Apr. 26, 2019).

<sup>&</sup>lt;sup>219</sup> See *id.* at 1-2.

<sup>&</sup>lt;sup>220</sup> See id. at 2 (quoting Request for Additional Information (Mar. 21, 2019) (ML19086A349)).

matter going to HDI's overall technical qualifications to conduct licensed activities at both Oyster Creek and Pilgrim.<sup>221</sup> The RAI does not raise a concern with Holtec's financial qualification to conduct licensed activities. Moreover, Pilgrim Watch did not raise a challenge to HDI's technical qualifications—Pilgrim Watch states that its motion is filed in support of its Contentions I (financial qualification) and II (NEPA claims).<sup>222</sup> We have found neither contention admissible, and the additional information in the motion does not render either contention admissible.

# 3. Pilgrim Watch Motion to File a New Contention

Pilgrim Watch also submitted a motion to file a new Contention III, raising licensee character claims. In support of Contention III, Pilgrim Watch argues that Holtec and SNC-Lavalin "have a long-standing history of corruption, fraud, bribery and lying in connection with their corporations' business dealings."<sup>223</sup> Pilgrim Watch claims that the NRC cannot grant the license transfer without first investigating Holtec International, SNC-Lavalin, HDI, and CDI and without determining, based on the investigations, that "each of them is trustworthy and reliable and otherwise possesses the character prerequisite to allowing it to participate in or control the decommissioning of Pilgrim Nuclear Power Station."<sup>224</sup>

Pilgrim Watch claims that its contention is timely because it only learned upon reading our June 18, 2019, license transfer decision in *Oyster Creek* that the NRC conducted "no background check and made no determination of trustworthiness and reliability" of HDI, CDI,

<sup>224</sup> *Id.* at 1.

<sup>&</sup>lt;sup>221</sup> Merely identifying a Staff RAI, which is a common Staff practice in seeking information as part of its review of applications, does not identify a genuine material dispute with an application. *See, e.g., Oconee*, CLI-99-11, 49 NRC at 336-37.

<sup>&</sup>lt;sup>222</sup> See Pilgrim Watch's Reply to Applicants' Answer Opposing Pilgrim Watch's Motion to Supplement its Motion to Intervene and Request for Hearing (May 6, 2019), at 4. Pilgrim Watch again improperly casts its motion as merely a "supplement" but not an amendment to its hearing request. *Id.* NRC regulations do not provide for such supplements to hearing requests that are not filed under the contention admissibility regulations.

<sup>&</sup>lt;sup>223</sup> See Pilgrim Watch Motion to File a New Contention (July 16, 2019), at 10 (PW Motion to File New Contention).

Holtec, and SNC-Lavalin, and that the NRC has "no intention of considering the trustworthiness, reliability, and character" of these entities.<sup>225</sup> Pilgrim Watch also bases the timeliness of its contention on a June 19, 2019, e-mail from an NRC Public Affairs officer responding to James Lampert's June 17, 2019, e-mail, in which Mr. Lampert inquired about whether NRC rules, regulations, or policies require a licensee to be deemed trustworthy and reliable.<sup>226</sup> Further, Pilgrim Watch states that only on June 18, 2019, did it learn of a letter—dated December 20, 2018—from the NRC responding to other concerns expressed regarding Holtec International..<sup>227</sup>

While the NRC has the discretion and the authority under the AEA to examine questions of licensee character, and we may admit for hearing a contention challenging an applicant's or licensee's character, there are no statutory or regulatory requirements mandating the NRC to conduct an investigation into the character of license transfer applicants and their owners. Pilgrim Watch's references to regulatory requirements governing licensee programs for controlling access to nuclear power plants, including the use of background checks, therefore are not relevant to this license transfer proceeding..<sup>228</sup>

Pilgrim Watch in fact makes clear that its contention does not "seek to prove" that Holtec, SNC-Lavalin, HDI, and CDI are untrustworthy and unreliable; rather its contention is that in order to grant the license transfer application, the NRC must first conduct an investigation into these companies' character.<sup>229</sup> As warranted, the NRC examines allegations involving management conduct, culture, or specific improper or illegal actions by licensees or their

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<sup>&</sup>lt;sup>225</sup> See *id.* at 5.

<sup>&</sup>lt;sup>226</sup> See id. at 4-5; see also id., Ex. 1, E-mail from Neil Sheehan, NRC Public Affairs, to James Lampert (June 19, 2019).

<sup>&</sup>lt;sup>227</sup> See PW Motion to File New Contention at 4; see also id., Ex. 1, Letter from Dori L. Willis, NRC, to Kevin Kamps, BeyondNuclear.Org (Dec. 20, 2018) (Kamps Letter).

<sup>&</sup>lt;sup>228</sup> See id. at 19-20 (citing 10 C.F.R. § 73.56).

<sup>&</sup>lt;sup>229</sup> See Pilgrim Watch Reply to Applicants' Answer Opposing Pilgrim Watch's Motion to File a New Contention (Aug. 19, 2019), at 2; see also PW Motion to File New Contention at 2-3.

personnel. But there is no requirement to conduct investigations into the corporate "character" of companies that submit applications to the NRC.

Moreover, we find the contention neither timely nor otherwise admissible. Motions for leave to file a new contention after the applicable deadline for contentions will not be entertained unless the information upon which the filing was based was not previously available; the information upon which the filing is based is materially different from information previously available; and the filing has been submitted in a timely fashion based on the availability of the information..<sup>230</sup> None of the three documents on which Pilgrim Watch relies to show timeliness provides good cause for the delayed filing of Contention III.

Our decision in *Oyster Creek* did not set forth a new standard regarding contentions raising claims of licensee character. We reiterated a longstanding NRC standard that, to be admissible as a litigable matter in an adjudicatory proceeding, claims of deficient licensee character or integrity must have "some direct and obvious relationship between the character issues and the licensing action in dispute."<sup>231</sup> We stated that claims of prior violations or events involving a company must be "directly germane to the challenged licensing action."<sup>232</sup> Our decision does not justify the delayed submission of Contention III. Moreover, the claims regarding SNC-Lavalin that we referenced in *Oyster Creek* were not new matters; we noted that similar comments regarding SNC-Lavalin had been filed before the NRC in November 2018. And the petitioner in that proceeding, the Township of Lacey, filed its petition to intervene raising the SNC-Lavalin claims in November 2018 as well. Our *Oyster Creek* decision therefore presents no new information that would serve as a basis for Contention III.

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<sup>&</sup>lt;sup>230</sup> See 10 C.F.R. § 2.309(c)(1).

 <sup>&</sup>lt;sup>231</sup> Oyster Creek, CLI-19-6, 89 NRC at 477 (quoting *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 365 (2001)).
<sup>232</sup> Id.

Nor does the June 19, 2019 e-mail from the NRC's Public Affairs officer, responding to a question from Mr. Lampert, provide a ground for timely filing. The e-mail merely reflected an effort to respond to Mr. Lampert's inquiry regarding NRC regulations and policy. It does not contain new and materially different information than information previously available.

Lastly, Pilgrim Watch states that it only learned of a December 2018 letter, which Pilgrim Watch cited in support of Contention 3, from the NRC in June 2019.<sup>233</sup> The letter responded to an allegation against Holtec raised by Mr. Kamps and the Beyond Nuclear organization. But Pilgrim Watch does not indicate that it could not have known earlier of the referenced allegations against Holtec, which involved alleged events that took place between 2000 and 2004.<sup>234</sup> Indeed, Pilgrim Watch in its proposed contention cites to information provided by Mr. Kamps and Beyond Nuclear relevant to these allegations were in the public domain but states it was not aware earlier of them, and that it is basing the timeliness of its claim on new information in the NRC's letter. There is, however, no new information in the letter that supports Contention III. The letter states, for example, that Mr. Kamps did not provide specific information or details pertaining to any activities that could be in violation of NRC regulations. The letter further states that the individual to whom a purported bribe was offered is deceased and therefore the NRC could not obtain "additional information regarding the attempted bribe."<sup>236</sup>

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<sup>&</sup>lt;sup>233</sup> See PW Motion to File New Contention at 4.

<sup>&</sup>lt;sup>234</sup> See id., Ex. 1, Kamps Letter, Enclosure.

<sup>&</sup>lt;sup>235</sup> See id. at 16 & nn. 9-10.

<sup>&</sup>lt;sup>236</sup> See id., Ex. 1, Kamps Letter, Enclosure.

To be sure, Pilgrim Watch raises numerous claims concerning SNC-Lavalin.<sup>237</sup> But as Pilgrim Watch notes, these are "longstanding" claims that have been reported in "[n]umerous news media."<sup>238</sup> They are not new. And many of the claims involving SNC-Lavalin involve alleged wrongdoing in other countries; Pilgrim Watch does not link any of the alleged improprieties with the Pilgrim facility. We have stated that "[a]bsent strong support for a claim that difficulties at other plants run by a corporate parent will affect the plant(s) at issue before the Commission, we are unwilling to use our hearing process as a forum for a wide-ranging inquiry into the corporate parent's general activities across the country."<sup>239</sup> In this case, Pilgrim Watch seeks that we link disparate international activities from years ago, with no obvious connection to nuclear power plant decommissioning or the Pilgrim facility, to this license transfer action merely because the international co-parent of CDI was involved in those actions. But Pilgrim Watch provides no adequate link between SNC-Lavalin and this license transfer.

Pilgrim Watch also raises concerns regarding Holtec's Chief Executive Officer (CEO). These claims include asserted false or misleading statements in a 2014 application submitted to New Jersey government officials..<sup>240</sup> But the article that Pilgrim Watch cites reflects that New Jersey has a task force looking into matters that include the allegation..<sup>241</sup> If the investigation into the actions in New Jersey results in findings that bear on Holtec's applications pending before the NRC or on its licensed activities, we will consider the findings and respond as appropriate. Here, however, Pilgrim Watch has not established a "direct and obvious"

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<sup>&</sup>lt;sup>237</sup> See id. at 10-14; id., Ex. 2 at 29-32.

<sup>&</sup>lt;sup>238</sup> See *id.* at 10.

<sup>&</sup>lt;sup>239</sup> *Power Authority of the State of New York* (James A. Fitzpatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 312 (2000).

<sup>&</sup>lt;sup>240</sup> See PW Motion to File New Contention at 14-15; *id.*, Ex. 2 at 33-35.

<sup>&</sup>lt;sup>241</sup> See Nancy Solomon and Jeff Pillets, *A False Answer, a Big Political Connection and* \$260 *Million in Tax Breaks,* (May 23, 2019), available at <u>https://www.propublica.org/article/holtec-international-george-norcross-tax-breaks</u> (last visited July 2, 2020).

relationship between the claim and this license transfer action. To avoid open-ended inquiries into matters ultimately unrelated to NRC-licensed activities, we have limited contentions raising claims of poor or improper management or character to claims that "relate directly to the proposed licensing action."<sup>242</sup> Pilgrim Watch's motion is both untimely and does not raise an admissible contention related directly to the license transfer application. We therefore deny it.

### 4. Pilgrim Watch Motion on Biodiversity

Finally, Pilgrim Watch filed a motion to supplement its request for hearing with what it asserts is new and significant information regarding biodiversity.<sup>243</sup> The motion references a *New York Times* article describing a report by the United Nations on biodiversity and ecosystem services.<sup>244</sup> Pilgrim Watch argues that the report and related United Nations statement is relevant to its Contention II on the environmental impacts of decommissioning and that it is relevant to its claim in Contention I that Holtec's cost estimate is inaccurate. We deny the motion.

As we have noted, our regulations do not provide for a motion to supplement a hearing request. Pilgrim Watch does not address the timeliness factors for filing a new or amended contention under 10 C.F.R. § 2.309(c)(1). In any event, the asserted biodiversity issue is

<sup>244</sup> See *id.* at 1-2.

<sup>&</sup>lt;sup>242</sup> Millstone, CLI-01-24, 54 NRC at 366 (quoting Georgia Institute of Technology (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 120 (1995)). In addition, Pilgrim Watch quotes a letter that was sent from the New Mexico Commissioner of Public Lands to Holtec's CEO, with copies to the NRC Chairman and the Secretary of Energy. See PW Motion to File New Contention at 15-16; see also id., Ex. 2 at 36-37 (Letter from Stephanie Garcia Richard, Commissioner of Public Lands, to Krishna Singh, President and CEO of Holtec (June 19, 2019)). The letter states that Holtec made misrepresentations to the NRC in its application for a nuclear waste storage facility in New Mexico. We are aware that this letter has been submitted by a petitioner in the Holtec International (Hi-Store Consolidated Interim Storage Facility) (CISF) proceeding on the waste disposal facility application, which that letter concerns. This matter is already under consideration in the Holtec CISF proceeding, to which the claims directly pertain. Pilgrim Watch's motion, however, does not draw a direct link between the New Mexico Commissioner of Public Land's letter and this license transfer proceeding.

<sup>&</sup>lt;sup>243</sup> Pilgrim Watch Motion to Supplement its Motion to Intervene and Request for Hearing – Biodiversity (May 9, 2019).

outside the scope of this proceeding. In addition, Pilgrim Watch does not explain how the asserted biodiversity concerns would impact decommissioning costs and therefore fails to raise a genuine dispute challenging Holtec's cost estimate. The motion therefore does not render Pilgrim Watch's Contention I admissible.

# **III. CONCLUSION**

For the reasons outlined in this decision, we *deny* Pilgrim Watch's request for hearing and petition to intervene.

IT IS SO ORDERED.





Annette L. Vietti-Cook Secretary of the Commission

Dated at Rockville, Maryland, This 12<sup>th</sup> day of November 2020.

### **Commissioner Baran, Dissenting**

In this license transfer proceeding for the Pilgrim Nuclear Power Station, Pilgrim Watch submitted one contention challenging the Applicants' financial qualifications and a second contention arguing that NRC did not meet its obligations under the National Environmental Policy Act (NEPA). The majority decision finds both contentions inadmissible and denies Pilgrim Watch's request for a hearing. In my view, the majority decision takes an overly strict approach to contention admissibility and inappropriately delves into and decides the merits of aspects of the contentions. It also downplays the importance of the financial qualifications review at the time of license transfer. Therefore, I respectfully dissent. I would admit aspects of both Pilgrim Watch contentions and find that Pilgrim Watch has standing to pursue those contentions at a hearing.

### I. BACKGROUND

NRC regulations require a license transfer applicant like Holtec to demonstrate its financial and technical qualifications.<sup>1</sup> As the Pilgrim reactor is permanently shut down, Holtec must demonstrate that it has the financial qualifications both to complete radiological decommissioning and to manage spent fuel until it is removed from the site. Because the exemption issued by the NRC Staff allows Holtec to withdraw funds from the decommissioning trust fund for non-radiological site restoration, those site restoration costs are also relevant to our review.

Holtec relies solely on the funding in the Pilgrim decommissioning trust fund to demonstrate its financial qualifications. At the time of the license transfer closing, the trust fund contained \$1.03 billion. The cash flow analysis in Holtec's application projects that approximately \$3.6 million will remain in the trust fund in 2063, by which time Holtec expects the

<sup>&</sup>lt;sup>1</sup> See 10 CFR § 50.82(a)(8)(i)(B) and (C); 10 CFR § 50.80(b)(1)(i).

spent fuel to be removed from the site. Holtec's application projects that, by the end of 2027, \$210 million will remain in the fund for spent fuel management (the maintenance and oversight of the Independent Spent Fuel Storage Installation (ISFSI) until 2063).

# II. PILGRIM WATCH'S CONTENTION I ON FINANCIAL QUALIFICATIONS

In its financial qualifications contention, Pilgrim Watch argues that the Applicants have not presented sufficient evidence to NRC of adequate financial assurance to meet regulatory requirements..<sup>2</sup> Pilgrim Watch contends that Holtec's decommissioning cost estimate (on which the license transfer application relies) is insufficiently detailed and inadequately supported. In its timely Motion to Supplement, Pilgrim Watch provides additional factual support for this contention by including new information related to a planned delay in Holtec's decommissioning schedule. The Motion to Supplement should be granted.

This element of Pilgrim Watch's financial qualifications contention is admissible. Pilgrim Watch argues that Holtec's new plan to take an additional two years or more to complete decommissioning and site restoration renders Holtec's cash flow analysis inaccurate. Holtec's application does not account for this delay, and Pilgrim Watch raised a material dispute over whether increased project management and overhead costs from the schedule change would exceed the projected \$3.6 million trust fund surplus by a substantial margin. Based on the information before us, I find that Pilgrim Watch has raised a genuine factual dispute about whether potential increased costs due to the timeline change will have a material impact on Holtec's financial qualification demonstration.

Holtec may be able to obtain damages from the Department of Energy for partial breach of contract as a result of the Department's failure to take title to Pilgrim's spent fuel. However, these potential litigation recoveries are not part of the financial qualifications demonstration in

<sup>&</sup>lt;sup>2</sup> *Pilgrim Watch Petition to Intervene and Hearing Request* (Feb. 20, 2019) (Pilgrim Watch Petition) at 14-15.

Holtec's application. As a result, this potential source of future funding cannot be considered in assessing the admissibility of Pilgrim Watch's contention.

Pilgrim Watch has raised a genuine issue of material fact regarding the adequacy of Holtec's cost estimates. Therefore, this aspect of Pilgrim's Watch's Contention I should be admitted for hearing. A hearing is the proper forum for examining whether any license conditions, such as requiring Holtec to deposit some portion of the litigation recoveries into the decommissioning trust fund, are necessary to ensure the overall adequacy of spent fuel management funding.

### III. PILGRIM WATCH'S CONTENTION II ON NEPA

In Contention II, Pilgrim Watch argues that a NEPA environmental analysis must be prepared as part of the agency's review of Holtec's license transfer application. Pilgrim Watch points to the potential negative environmental consequences of insufficient funding to complete radiological decommissioning, perform site restoration, and manage Pilgrim's spent fuel until it is removed from the site. Holtec contends that an Environmental Assessment (EA) or Environmental Impact Statement (EIS) is not required because license transfers fall under a categorical exclusion established by NRC regulations. Pilgrim Watch and Holtec both recognize that NRC regulations provide a categorical exclusion for at least some license transfer applications. They disagree about whether the categorical exclusion applies in this particular case.

The categorical exclusion in 10 C.F.R. § 51.22(c)(21) applies to "[a]pprovals of direct or indirect transfers of any license issued by NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license." The dispute centers on the meaning of "required to reflect" and the application of that phrase to the facts of this case. As the majority decision explains,

the Staff issued the license amendment reflecting the transfer and the name change, as well as the deletion of four financial license conditions imposed when the NRC approved the transfer of the Pilgrim license from the Boston Edison

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Company. This included License Condition J (4), which had required ENGC to have access to contingency funding of "not less than fifty million dollars (\$50m) for payment, if needed, of Pilgrim operating and maintenance expenses, the cost to transition to decommissioning status in the event of a decision to permanently shut down the unit, and decommissioning costs." The condition specified that once the plant had shut down following a decision to decommission, "Entergy Nuclear will use any remainder of the \$50m contingency fund that has not been used to safely operate and maintain the plant to support the safe and prompt decommissioning."<sup>3</sup>

The majority decision also notes that

although ENGC's name would be changed to Holtec Pilgrim, the same legal entity will continue to exist as Pilgrim's owner before and after the transfer ... ENGC would be converted to a limited liability company and [] under applicable Massachusetts law on such a conversion, the converted entity is considered to be the same entity as that which existed prior to the conversion.<sup>4</sup>

Pilgrim Watch argues that dropping the substantive license condition providing for a

\$50 million contingency fund was not "required to reflect" the approved license transfer.<sup>5</sup> This is

because the \$50 million license condition was applied to ENGC, which will continue to exist

after the license transfer under the name Holtec Pilgrim. According to Pilgrim Watch, "Holtec

and Entergy seek to do far more than conform the license to reflect the proposed transfer,"

which could have been accomplished by changing the name from ENGC to Holtec Pilgrim.<sup>6</sup>

On the other hand, Holtec argues that removal of the \$50 million contingency fund license

condition "merely conforms the license to reflect the proposed transfer, because Holtec Pilgrim

and HDI are basing their financial qualifications on the adequacy of the [decommissioning trust

<sup>&</sup>lt;sup>3</sup> Memorandum and Order at 14-15 (quoting Letter from A. Christopher Bakken III, ENOI, to NRC Document Control Desk (Nov. 16, 2018), Encl. 1, Application for Order Consenting to Direct and Indirect Transfers of Control of Licenses and Approving Conforming License Amendment, and Request for Exemption from 10 C.F.R. § 50.82(a)(8)(i)(A)(Application), Attach. A, "Renewed Facility Operating License (Changes)," at 4, Condition J (4) (ML18320A031)).

<sup>&</sup>lt;sup>4</sup> Memorandum and Order at 3, n.9.

<sup>&</sup>lt;sup>5</sup> Pilgrim Watch Petition at 88.

<sup>&</sup>lt;sup>6</sup> Pilgrim Watch Reply to Applicants' Answer Opposing Pilgrim Watch Petition for Leave to *Intervene and Hearing Request* (Apr. 1, 2019), at 26 (internal quotation marks and brackets omitted), 27.

fund] and are not relying on any parent support agreement or any other form of supplemental financial assurance to support their financial qualifications."<sup>7</sup> In Holtec's view, the deletion of the license condition is an "administrative amendment.".<sup>8</sup>

Thus, there is a clear dispute about the application of the categorical exclusion provision to the facts of this case. Pilgrim Watch and Holtec both make plausible arguments about whether NRC can rely on a categorical exclusion for the Pilgrim license transfer. The majority decision inappropriately digs into the merits of the competing claims and, without the benefit of a hearing, decides that Holtec should prevail. At this stage in the proceeding, what matters is that Pilgrim Watch has met the requirements for an admissible contention. The merits of this substantive factual dispute must be resolved at a hearing.

## IV. PILGRIM WATCH'S STANDING

As Pilgrim Watch has submitted two admissible contentions, we must determine whether it has standing to pursue those contentions. In determining whether a petitioner has established standing, the Commission looks for guidance to judicial concepts of standing, which require a showing of a concrete and particularized injury (actual or threatened) that is fairly traceable to the challenged action and likely to be redressed by a favorable decision in the proceeding..<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> Applicants' Answer Opposing Pilgrim Watch Petition for Leave to Intervene and Hearing Request (Mar. 18, 2019), at 65.

<sup>&</sup>lt;sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> See, e.g., Georgia Institute of Technology (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995); USEC, Inc. (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311 (2005).

The asserted injury also must be arguably within the zone of interests protected by the governing statute.<sup>10</sup>

Pilgrim Watch seeks admission as a party to intervene on behalf of its members and asserts that it has representational standing.<sup>11</sup> To establish representational standing, an organization must demonstrate how at least one of its members may be affected by the challenged licensing action and would have standing in his or her own right.<sup>12</sup> The organization must identify that member by name and address and demonstrate that the member has authorized the organization to request a hearing on his or her behalf..<sup>13</sup> Here, Pilgrim Watch included with its hearing request the declarations of five of its members..<sup>14</sup> The declarants affirm that they reside at distances ranging from approximately three to ten miles from Pilgrim.

In previous license transfer proceedings, the Commission found the concerns of nearby residents over a licensee's financial ability to properly carry out and complete decommissioning sufficient to establish standing.<sup>15</sup> In the context of standing, the Commission has recognized that inadequate decommissioning funding could lead to uncompleted decommissioning, and in turn that inadequate "cleanup of the reactor site . . . may result in adverse health effects, loss of aesthetic enjoyment, and diminished property values for those who live, work or play in the immediate vicinity."<sup>16</sup>

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<sup>&</sup>lt;sup>10</sup> Gulf States Utilities Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 47 (1994).

<sup>&</sup>lt;sup>11</sup> See Pilgrim Watch Petition at 6.

<sup>&</sup>lt;sup>12</sup> Vermont Yankee Nuclear Power Corp. and AmerGen Vermont, LLC, CLI-00-20, 52 NRC 151, 163 (2000).

<sup>&</sup>lt;sup>13</sup> *Id*.

<sup>&</sup>lt;sup>14</sup> See Declarations, attached as Ex. 1 to PW Petition at 133-143.

<sup>&</sup>lt;sup>15</sup> See, e.g., Vermont Yankee, CLI-00-20, 52 NRC at 163 n.4 (petitioner would "like to walk and hike in the area after it is decommissioned and therefore claims an interest in sufficient funding being set aside for the decommissioning to be properly carried out").

<sup>&</sup>lt;sup>16</sup> See Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 207-09 (1998) (where petitioner resided approximately 6 miles away and walked and hiked in surrounding area); see also Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma

Consistent with these precedents, Pilgrim Watch has adequately demonstrated an injury in fact that is fairly traceable to the license transfer action. Pilgrim Watch's fundamental concern is that the Pilgrim site could be abandoned due to a lack of sufficient funding for decommissioning and spent fuel management, or that insufficient funding could prevent decommissioning work and spent fuel activities from being "properly managed . . . according to applicable federal, state, and local requirements." <sup>17</sup> It argues that underfunding may lead to "cutting corners" and that funding may prove inadequate to maintain the ISFSI long-term (including in the event the ISFSI is affected by a natural hazard, such as rising sea levels)..<sup>18</sup> Pilgrim Watch members reside within a few miles of the facility and affirm that they frequently engage in recreational activities on the beaches and bays in the area of Pilgrim.

Moreover, Pilgrim Watch seeks a modification of the licenses to prevent potential underfunding.<sup>19</sup> Insufficient financial qualifications, if demonstrated on the merits, can be remedied in this proceeding through financial license conditions or other means. Thus, the injury asserted by Pilgrim Watch can be redressed by a favorable decision in this proceeding.

Therefore, I find that Pilgrim Watch has standing to intervene in this proceeding.

### V. CONCLUSION

For these reasons, I would *grant* Pilgrim Watch's request for hearing and petition to intervene and *admit* the specified portions of Pilgrim Watch's Contention I and Contention II.

Site), CLI-94-12, 40 NRC 64, 75-76 (1994) (acknowledging link between adequacy of funding and ensuring safe and timely decontamination of site).

<sup>&</sup>lt;sup>17</sup> Pilgrim Watch Petition at 8.

<sup>&</sup>lt;sup>18</sup> *See id.* at 133 (Mary Lambert Declaration); 140 (Rebecca Chin Declaration); 142 (David O'Connell Declaration).

<sup>&</sup>lt;sup>19</sup> See, e.g., Pilgrim Watch Petition at 134, 140.

#### Commissioner Hanson, dissenting in part

I join in part, and dissent in part from the majority's decision to dismiss Pilgrim Watch's petition for leave to intervene and request for a hearing in this license transfer proceeding. While I agree with the majority's dismissal of Contention II, I would find that Pilgrim Watch has met the contention admissibility standards for certain aspects of Contention I and has demonstrated standing to intervene.

This license transfer proceeding presents the Commission with questions not answered by past cases or addressed by current guidance. NRC guidance describes the general information that needs to be included in an application of this type, but it does not elaborate on the level of detail that is expected or required to demonstrate reasonable assurance of adequate protection. While I agree with the majority's conclusion that an applicant need not provide an exhaustive level of detail at this stage, the applicant's estimates should have an articulated basis to inform not only the agency decisionmaker, but also the interested public. Pilgrim Watch raises a series of concerns in Contention I related to the cost estimates provided by the applicants, citing the slim margin provided in the application between the estimated costs and the projected amount in the decommissioning trust fund..<sup>1</sup> As specified below, I would find certain aspects of Contention I admissible.

First, Pilgrim Watch challenges the lack of detail provided in the application to justify a 17% contingency factor..<sup>2</sup> The majority relies on past examples of contingency factors in other cases to justify dismissing this concern and further states that the "NRC does not have a minimum contingency requirement for the site-specific estimate." While this information is pertinent to determining an appropriate contingency factor, it does not address the issue raised by Pilgrim Watch in this contention admissibility proceeding. Namely, that there is a lack of

<sup>&</sup>lt;sup>1</sup> *Pilgrim Watch Petition to Intervene and Hearing Request* (Feb. 20, 2019) (PW Petition). <sup>2</sup> PW Petition at 22.

justification provided in the application for the choice of a 17% contingency factor. I would therefore find that this issue raises a genuine dispute with the applicants on a material issue, meeting 10 C.F.R. § 2.309(f)(1)(vi).

Second, Pilgrim Watch is concerned that decommissioning costs will rise faster than the rate of inflation and that these cost increases will result in a depletion of the decommissioning trust fund before final license termination..<sup>3</sup> Pilgrim Watch references an NRC document and two studies that call into question the assumptions made in the application about the cost of decommissioning..<sup>4</sup> Pilgrim Watch further explains how a change in this assumption could influence the overall cost estimate and impact the financial assurance provided by the decommissioning trust fund..<sup>5</sup> The majority evaluates the merits of Pilgrim Watch's supporting evidence and holds it to a standard not anticipated by our regulations at the contention admissibility stage. Further, the majority relies heavily on Holtec's future obligation to submit annual decommissioning financial assurance status reports. But future requirements cannot fulfill the obligations of an applicant now. I would therefore find that that Pilgrim Watch raises a genuine dispute with the applicants on a material issue, meeting 10 C.F.R. § 2.309(f)(1)(vi).

In addition to the two issues raised in its initial petition for hearing, Pilgrim Watch submitted a motion to supplement its hearing request with additional information related to its concerns about a potential delay in schedule causing increased overhead costs and in turn, a deficiency in the amount available in the decommissioning trust fund..<sup>6</sup> This motion includes a

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<sup>&</sup>lt;sup>3</sup> See PW Petition at 24-25.

<sup>&</sup>lt;sup>4</sup> See PW Petition at 23-26; *see also* "2018 Nuclear Decommissioning Funding Study," Callan Investments Institute, at 3, 9; "2015 Nuclear Decommissioning Funding Study," Callan Investment Institute, at 3; NRC Questions and Answers, Encl. 5, SECY-11-0133 (ML111950031).

<sup>&</sup>lt;sup>5</sup> See PW Petition at 24-25.

<sup>&</sup>lt;sup>6</sup> See Pilgrim Watch Motion to Supplement its February 20, 2019 Motion to Intervene and Request for Hearing, its April 1, 2019 Reply to Petitioners, and its May 3, 2019 Motion to Supplement (Nov. 25, 2019).

Holtec presentation from November 2019, which Pilgrim Watch offers as support to demonstrate a delay in the schedule. Pilgrim Watch asserts that this delay is not accounted for in the current cost estimates and is therefore material to whether the decommissioning trust fund is adequate to demonstrate Holtec's financial assurance.<sup>7</sup> The majority rejects this additional information as unsupported, stating that it does not explain how the delay could materially impact the cash flow analysis. Further, the majority opinion states that Pilgrim Watch does not challenge the assumption that the potential added costs from the timeline change would be covered by the contingency allowance provided in the application. In my view, Pilgrim Watch has addressed these precise issues adequately enough to meet the contention admissibility standards. Not only has Pilgrim Watch connected the dots between the delay in schedule and the potential impact on cost estimates, it separately challenges the assumptions underlying the contingency allowance as inadequate. Presentation of additional material or expert testimony is unnecessary at this stage in the proceeding to support the simple assertion that delays in schedule, on the order of years, could challenge a cost estimate. As this motion was based on information not previously available and filed promptly after the new information became available, I would find that that Pilgrim Watch has demonstrated good cause for an amended contention under 10 C.F.R. § 2.309(c)(1) and raised a genuine dispute with the applicants on a material issue pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

I would further find that Pilgrim Watch has established representational standing in this proceeding pursuant to 10 C.F.R. § 2.309(d). The Pilgrim Watch petition includes declarations from members living within 10 miles of the site that have assented to representation. Further, Pilgrim Watch describes an injury in fact that is fairly traceable to the proceeding. Namely, that mismanagement of decommissioning activities or a shortfall in the decommissioning trust fund

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<sup>&</sup>lt;sup>7</sup> See *id.* at 5-6.

could result in a radiological accident or radiological contamination with offsite consequences.<sup>8</sup> Finally, consistent with Commission precedent, I would allow Pilgrim Watch to adopt the contentions and supporting information submitted on behalf of the Commonwealth of Massachusetts because it has offered at least one admissible contention and established standing to intervene in this proceeding..<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> See PW Petition at 7-8.

<sup>&</sup>lt;sup>9</sup> Consolidated Edison Co. of New York (Indian Point Units 1 and 2), CLI-01-19, 54 NRC 109, 132-33 (2001).

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of
ENTERGY NUCLEAR OPERATIONS, INC. ENTERGY NUCLEAR GENERATION COMPANY, HOLTEC INTERNATIONAL, and HOLTEC DECOMMISSIONING INTERNATIONAL, LLC

Docket Nos. 50-293 and 72-1044 LT

(Pilgrim Nuclear Power Station)

# CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **COMMISSION MEMORANDUM AND ORDER** (CLI-20-12) have been served upon the following persons by Electronic Information Exchange.

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Entergy Services, Inc. 101 Constitution Ave., NW Suite 200 East Washington, DC 20001 Susan H. Raimo E-mail: sraimo@entergy.com Pilgrim Nuclear Power Station Docket Nos. 50-293 and 72-1044 LT COMMISSION MEMORANDUM AND ORDER (CLI-20-12)

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Office of the Secretary of the Commission

Dated at Rockville, Maryland, this 12<sup>th</sup> day of November 2020.