# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### Before the Commission

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Docket Nos.	50-293-LT
)	72-1044-LT
)	
)	
	Docket Nos.

# Applicants' Answer Opposing the Commonwealth of Massachusetts' Petition for Leave to Intervene and Hearing Request

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# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### Before the Commission

In the Matter of	)		
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Entergy Nuclear Operations, Inc,	)		
Entergy Nuclear Generation Company,	)	Docket Nos.	50-293-LT
Holtec International, and	)		72-1044-LT
Holtec Decommissioning International, LLC	)		
_	)		
(Pilgrim Nuclear Power Station)	)		

# Applicants' Answer Opposing the Commonwealth of Massachusetts' Petition for Leave to Intervene and Hearing Request

### I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(i)(1), Entergy Nuclear Operations, Inc. ("ENOI"), Entergy Nuclear Generation Company ("ENGC" – to be renamed "Holtec Pilgrim"), Holtec International ("Holtec"), and Holtec Decommissioning International, LLC ("HDI") (collectively, "Applicants") hereby answer and oppose the Commonwealth of Massachusetts' Petition for Leave to Intervene and Hearing Request (Feb. 20, 2019) ("Petition" or "Pet.") in the Pilgrim Nuclear Power Station ("Pilgrim") license transfer proceeding. The Petition should be denied because the Commonwealth of Massachusetts ("Petitioner" or "Commonwealth") has failed to propose an admissible contention.

The Commission's regulations and case law clearly set forth the requirements that a petitioner must satisfy in order to propose an admissible contention. Petitioner bears the burden of pleading contentions that meet the Commission's heightened threshold for the admission of contentions. In its Petition, the Commonwealth proposed two contentions, but neither meets this standard.

The Commonwealth's first contention primarily challenges the financial qualifications of HDI and Holtec Pilgrim to decommission Pilgrim but fails to demonstrate any genuine material dispute with the financial analysis and other pertinent information in the application demonstrating their financial qualifications. The Commonwealth merely speculates regarding various possibilities that could affect HDI's decommissioning cost estimate for Pilgrim. The Commonwealth does not address or provide any basis to dispute the efficacy of the Commission's rigorous decommissioning oversight rules, which require annual reporting and, as needed, adjustment to funding for decommissioning and spent fuel management, as well as further review of funding assurance when a full site characterization is submitted as part of the license termination plan. The Commonwealth also fails to address or dispute the substantial conservatism in the financial analysis in the license transfer application, in that the cash flow analysis does not credit recovery of spent fuel costs from the U.S. Department of Energy ("DOE"), which will provide considerable additional cash flow over the life of the project and ample means to adjust funding assurance if needed. Nor does the Commonwealth demonstrate that there is any realistic possibility of a shortfall preventing completion of decommissioning, as the transferred fund will contain over \$1 billion, and upon completion of decommissioning (and site restoration) of all portions of the site other than the independent spent fuel storage installation ("ISFSI") is still projected to contain over \$200 million without any credit for further DOE recoveries.

The Commonwealth's second contention argues that an environmental review of the license transfer application is required. This contention impermissibly challenges the Nuclear Regulatory Commission's ("NRC") rule categorically excluding license transfers from environmental review. It also seeks to conflate the license transfer application with HDI's post-

shutdown decommissioning activities report ("PSDAR") and, contradicting Commission precedent, to treat HDI's PSDAR as a major federal action requiring approval and environmental review. In addition, it provides no basis to suggest that the license transfer application would result in any significant environmental impact, and impermissibly challenges the Continued Storage Rule.

As neither contention is admissible, the Petition should be denied.

#### II. BACKGROUND

On November 16, 2018, Applicants submitted an application requesting that the Commission approve the direct transfer of ENOI's operating authority (*i.e.*, authority to conduct licensed activities) under the Pilgrim Renewed Facility Operating License No. DPR-35 and the general license for the Pilgrim ISFSI to HDI, and the indirect transfer of control of the licenses to Holtec.<sup>1</sup> Applicants also request that the NRC approve conforming amendments to the Operating License to reflect this transfer.

The transfer is sought as part of a transaction in which Holtec, through a wholly-owned subsidiary, Nuclear Asset Management Company, LLC, will acquire the equity interests in ENGC (the licensed owner of Pilgrim), which will then be renamed Holtec Pilgrim, LLC ("Holtec Pilgrim"). At the same time, ENOI's operating authority will be transferred to HDI, a wholly-owned subsidiary of Holtec formed to decommission nuclear plants.

The Application provides the information required by 10 C.F.R. § 50.80, including a demonstration of HDI's and Holtec Pilgrim's technical and financial qualifications. Because the

Application for Order Consenting to Direct and Indirect Transfers of Control of Licenses and approving

Conforming License Amendment, and Request for Exemption from 10 CFR 50.82(a)(8)(i)(4). Pilarim Nu.

Conforming License Amendment, and Request for Exemption from 10 CFR 50.82(a)(8)(i)(A), Pilgrim Nuclear Power Station, Docket Nos. 50-293 & 72-1044, Renewed License No. DPR-35 (Nov. 16, 2018) (ADAMS Accession No. ML18320A031) ("Application" or "LTA").

license transfers will occur after Pilgrim has permanently ceased operation and has been permanently defueled, the demonstration of financial qualifications is based on funding assurance for decommissioning and spent fuel management, using the prepayment method.<sup>2</sup> As stated in the Application, under the terms of the Equity Purchase and Sale Agreement ("EPSA") included in the Application, the after-tax market value of Pilgrim's nuclear decommissioning trust ("NDT") must be no less than \$1.03 billion at closing (subject to an adjustment that will not impact Holtec Pilgrim's or HDI's financial qualifications, as discussed in the Application).<sup>3</sup> The Application provides a cash flow analysis demonstrating that this very substantial amount – over a billion dollars – in Pilgrim's NDT will be sufficient to cover the estimated cost of decommissioning and spent fuel management, as well as site restoration.<sup>4</sup> Because of the reliance on Pilgrim's NDT, the Application seeks an exemption to allow the NDT to be used for spent fuel management and site restoration costs.<sup>5</sup> As stated in the Application, the cash flow analysis upon which financial qualifications and the exemption request are based is conservative, because it does not take credit for any proceeds that Holtec Pilgrim will recover from DOE through litigation or settlement of its claims for the spent fuel management costs it will incur as a result of the DOE's breach of its obligations to dispose of Pilgrim's spent nuclear fuel.<sup>6</sup>

Emphasis added.

<sup>&</sup>lt;sup>2</sup> 10 C.F.R. § 50.75(e)(1)(i) defines prepayment as follows:

Prepayment is the deposit made preceding the start of operation or the transfer of a license under § 50.80 into an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. Prepayment may be in the form of a trust, escrow account, or Government fund with payment by, certificate of deposit, deposit of government or other securities or other method acceptable to the NRC.

<sup>&</sup>lt;sup>3</sup> LTA at 3, and Encl. 1 at 17.

<sup>&</sup>lt;sup>4</sup> LTA, Encl. 1, Att. D (5<sup>th</sup> and 6<sup>th</sup> unnumbered pages).

<sup>&</sup>lt;sup>5</sup> LTA, Encl. 2.

<sup>&</sup>lt;sup>6</sup> LTA, Encl. 1 at 18.

On November 16, 2018, HDI also separately submitted a DECON Post-Shutdown Decommissioning Activities Report (hereinafter referred to as the "Revised PSDAR"), which includes HDI's site-specific decommissioning cost estimate ("DCE"). This Revised PSDAR is contingent upon NRC approval of the licenses, completion of transfers of the licenses and the sale closure. PSDAR and DCE explain that HDI's cost estimate is based on information compiled during an extensive due diligence period, including plant data and historical information obtained from Entergy, and includes a 17 percent contingency allowance (amounting to approximately \$165 million in contingency in the DCE on which the cash flow analysis is based).

On January 31, 2019, the NRC published a notice in the Federal Register regarding the Application. <sup>12</sup> In the Notice, the Commission provided an opportunity to any person whose interest may be affected, within 20 days of the Notice, to request a hearing and file a petition for leave to intervene in the direct transfer proceeding. The Notice states that any such petitions should be filed in accordance with the Commission's Agency Rules of Practice and Procedure set forth in 10 C.F.R. Part 2 and lays out the standards for pleading admissible contentions and establishing standing.

Letter from P. Cowan, HDI, to NRC, Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Pilgrim Nuclear Power Station (Nov. 16, 2018) (ADAMS Accession No. ML18320A040) ("Revised PSDAR").

<sup>&</sup>lt;sup>8</sup> Revised PSDAR, Encl. 1 (hereinafter cited as the "DCE"). The DCE is also summarized in the Application. *See* LTA, Encl. 1, Att. D (3<sup>rd</sup> and 4<sup>th</sup> unnumbered pages).

<sup>&</sup>lt;sup>9</sup> *Id.* at 2. Entergy has also submitted a PSDAR, which would remain operative if the license transfer does not occur. *See infra* note 101.

<sup>&</sup>lt;sup>10</sup> Revised PSDAR at 18; DCE at 7.

<sup>&</sup>lt;sup>11</sup> DCE at 41.

Pilgrim Nuclear Power Station; Consideration of Approval of Transfer of License and Conforming Amendment, 84 Fed. Reg. 816 (Jan. 31, 2019) ("Notice").

#### III. REGULATORY FRAMEWORK

### A. NRC Decommissioning and Related Financial Assurance Requirements

Under NRC regulations, decommissioning a nuclear reactor means to safely remove the facility from service, reduce residual radioactivity to a level that allows releasing the property for unrestricted use (or restricted use subject to conditions, not proposed here), and terminate the license. NRC regulations require that applicants and licensees provide reasonable assurance that funds will be available for the decommissioning process. The primary methods of providing financial assurance for decommissioning permitted by the NRC are through (1) prepayment; (2) an external sinking fund; (3) a surety, insurance, or other guarantee; or (4) a combination of these or equivalent mechanisms.

Once a licensee decides to cease operations permanently, NRC regulations impose additional requirements that govern three sequential phases for decommissioning activities: (1) initial activities; (2) major decommissioning and storage activities; and (3) license termination activities. The decommissioning process begins when a licensee certifies to the NRC Staff that it has permanently ceased operations and it has permanently removed fuel from the reactor vessel. NRC regulations require a licensee to submit a PSDAR prior to or within two years following the permanent cessation of operations. The PSDAR must contain a description of the planned decommissioning activities along with a schedule for their accomplishment, a

<sup>&</sup>lt;sup>13</sup> 10 C.F.R. § 50.2.

<sup>14 10</sup> C.F.R. § 50.75(a). The NRC requires nuclear power plant licensees to report to the agency the status of their decommissioning funds at least once every two (2) years, annually within five (5) years of the planned shutdown, and annually once the plant ceases operation.

<sup>&</sup>lt;sup>15</sup> 10 C.F.R. § 50.75(e)(1)(i)-(iii), (vi).

<sup>&</sup>lt;sup>16</sup> See generally 10 C.F.R. § 50.82(a).

<sup>&</sup>lt;sup>17</sup> 10 C.F.R. § 50.82(a)(1)(i)-(ii).

<sup>&</sup>lt;sup>18</sup> 10 C.F.R. § 50.82(a)(4)(i).

discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously-issued environmental impact statements, and a site-specific decommissioning cost estimate, including the projected cost of managing irradiated fuel. 19 The Staff notices its receipt of the PSDAR, makes the PSDAR available for public comment, and holds a public meeting on its contents.<sup>20</sup> The PSDAR serves to inform the public and NRC Staff of the licensee's proposed activities,<sup>21</sup> but approval is not required under the NRC rules.

Thus, absent any objections from the NRC Staff, the licensee may commence "major decommissioning activities" ninety (90) days after the Staff receives the PSDAR.<sup>22</sup> Under NRC regulations, a licensee may not perform decommissioning activities that would foreclose the release of the site for possible unrestricted use, result in significant environmental impacts not previously reviewed, or result in the lack of reasonable assurance that adequate funds will be available for decommissioning.<sup>23</sup>

Once a licensee submits its decommissioning cost estimate, it generally is allowed access to the balance of the NDT fund monies for the remaining decommissioning activities with "broad

<sup>10</sup> C.F.R. § 50.82(a)(4)(ii). The Staff presents comments received at the public meeting held on the PSDAR and makes available to the public a written transcript of the meeting. See Regulatory Guide 1.185, Rev. 1, Standard Format and Content for Post-Shutdown Decommissioning Activities Report (June 2013) at 4 (ADAMS Accession No. ML13140A038). As discussed further below, the PSDAR process does not give rise to a hearing opportunity.

Decommissioning of Nuclear Power Reactors, Final Rule, 61 Fed. Reg. 39,278, 39,281 (July 29, 1996) ("1996 Decommissioning Rule"). In establishing the current process governing decommissioning, the NRC "eliminate[d] the need for an approved decommissioning plan before major decommissioning activities can be performed." Id.

<sup>10</sup> C.F.R. § 50.82(a)(5). A "major decommissioning activity" for a nuclear power plant such as Pilgrim is defined as "any activity that results in permanent removal of major radioactive components, permanently modifies the structure of the containment, or results in dismantling components for shipment containing greater than class C waste in accordance with [10 C.F.R. § 61.55]." 10 C.F.R. § 50.2.

<sup>&</sup>lt;sup>23</sup> 10 C.F.R. § 50.82(a)(6).

flexibility."<sup>24</sup> However, the use of the NDT fund is limited in three important respects. First, withdrawals from the fund must be for expenses for "legitimate decommissioning activities" consistent with the definition of decommissioning in 10 C.F.R. § 50.2.<sup>25</sup> Second, the expenditure must not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise.<sup>26</sup> Finally, the withdrawals must not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.<sup>27</sup>

Additionally, the NRC Staff monitors the licensee's use of the decommissioning trust fund via its review of the licensee's annual financial assurance status reports.<sup>28</sup> Those annual reports must include, among other information, the amount spent on decommissioning activities, the amount remaining in the fund, and an updated estimate of the costs required to complete decommissioning.<sup>29</sup> If the licensee or NRC identifies a shortfall between the remaining funds and the updated cost to complete decommissioning (as a result of these annual status reports or otherwise), then the licensee must provide additional financial assurance.<sup>30</sup> The annual reports must also include the status of funding to manage spent fuel, including the amount of funds

<sup>&</sup>lt;sup>24</sup> See 1996 Decommissioning Rule, 61 Fed. Reg. at 39,285.

<sup>&</sup>lt;sup>25</sup> 10 C.F.R. § 50.82(a)(8)(i)(A).

<sup>&</sup>lt;sup>26</sup> 10 C.F.R. § 50.82(a)(8)(i)(B).

<sup>&</sup>lt;sup>27</sup> 10 C.F.R. § 50.82(a)(8)(i)(C).

<sup>&</sup>lt;sup>28</sup> 10 C.F.R. § 50.82(a)(8)(v).

<sup>&</sup>lt;sup>29</sup> 10 C.F.R. § 50.82(a)(8)(v)(A)-(B).

<sup>&</sup>lt;sup>30</sup> 10 C.F.R. § 50.82(a)(8)(vi). The determination whether a shortfall exists takes into account a two (2) percent annual real rate of return.

available, the projected cost of managing spent fuel until it is removed by the DOE and, if there is a funding shortfall, a plan to obtain additional funds to cover the cost.<sup>31</sup>

Unless otherwise authorized, the site must be decommissioned within sixty (60) years.<sup>32</sup> The licensee remains subject to NRC oversight until decommissioning is completed and the license is terminated. The licensee must submit a license termination plan ("LTP") at least two (2) years before the planned license termination date.<sup>33</sup> The LTP must include (a) a site characterization; (b) identification of remaining dismantlement activities; (c) plans for site remediation; (d) detailed plans for the final radiation survey; (e) description of the end use of the site, if restricted; (f) an updated site-specific estimate of remaining decommissioning costs; (g) a supplement to the environmental report describing any new information or significant environmental change associated with the licensee's proposed termination activities; and (h) identification of parts, if any, of the facility or site that were released for use before approval of the license termination plan.

The NRC, in turn, must notice receipt of the LTP in the *Federal Register*, make the plan available to the public for comment, schedule a public meeting near the facility to discuss the plan's contents, and offer an opportunity for a public hearing on the license amendment associated with the LTP.<sup>34</sup> The NRC will also prepare an environmental assessment or supplemental environmental impacts statement, as appropriate, to update prior environmental documentation prepared for compliance with the National Environmental Policy Act

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<sup>&</sup>lt;sup>31</sup> 10 C.F.R. § 50.82(a)(8)(vii).

<sup>&</sup>lt;sup>32</sup> 10 C.F.R. § 50.82(a)(3).

<sup>&</sup>lt;sup>33</sup> 10 C.F.R. § 50.82(a)(9)(i).

<sup>&</sup>lt;sup>34</sup> 10 C.F.R. § 50.82(a)(9)(iii).

("NEPA").<sup>35</sup> The Commission may not approve the LTP (via license amendment) and terminate the license until it makes the findings set forth in 10 C.F.R. § 50.82(a)(10) and (a)(11), respectively.<sup>36</sup>

### B. NRC Reactor License Transfer Requirements

Under Section 184 of the Atomic Energy Act, an NRC license, or any right thereunder, may not be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the NRC first gives its consent in writing.<sup>37</sup> This statutory requirement is codified in 10 C.F.R. § 50.80 and applies to both direct and indirect license transfers.<sup>38</sup> A transfer of control may involve either the licensed operator or any individual licensed owner of the facility.<sup>39</sup> Before approving a license transfer, the NRC reviews, among other things, the technical and financial qualifications of the proposed transferee.<sup>40</sup> The transfer review, in other words, focuses on the potential impact on the licensee's ability both to maintain adequate technical qualifications and organizational control and authority over the facility, and to provide adequate funds for safe operation and decommissioning.<sup>41</sup>

<sup>35</sup> 10 C.F.R. § 51.95(d).

<sup>&</sup>lt;sup>36</sup> 10 C.F.R. § 50.82(a)(10), (11).

<sup>&</sup>lt;sup>37</sup> 42 U.S.C. § 2234.

See NRC Backgrounder, "Reactor License Transfers," at 1-2 (Apr. 2016) (ADAMS Accession No. ML040160803). A direct license transfer occurs when an entity seeks to transfer a license it holds to a different entity (e.g., when a plant is to be sold or transferred to a new licensee in whole or part). An indirect license transfer takes place when there is a transfer of "control" of the license or of a license holder (e.g., as a result of a merger or acquisition at high levels within or among corporations. Id.

<sup>&</sup>lt;sup>39</sup> *See id.* at 1.

<sup>40</sup> See 10 C.F.R. §§ 50.80(b)(1), (c)(1); see also NUREG-1577, Rev. 1, Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance (Dec. 2001) (ADAMS Accession No. ML013330264).

See Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry, 62 Fed. Reg. 44,071, 44,077 (Aug. 19, 1997).

Section 189(a) of the Atomic Energy Act requires that the NRC offer an opportunity for hearing on a license transfer.<sup>42</sup> In 1998, the NRC adopted Subpart M of 10 C.F.R. Part 2 authorizing the use of a streamlined license transfer process with informal legislative-type hearings, rather than formal adjudicatory hearings.<sup>43</sup> These rules cover any direct or indirect license transfer for which NRC approval is required, including those transfers that require license amendments and those that do not.<sup>44</sup> Section 2.1315 codifies the Commission's generic determination that any conforming amendment to an operating license that only reflects the license transfer action involves a "no significant hazards consideration." That same regulation expressly provides that "[a]ny challenge to the administrative license amendment is limited to the question of whether the license amendment accurately reflects the approved transfer."

As part of the same rulemaking to streamline license transfer proceedings, the Commission also promulgated 10 C.F.R. § 51.22(c)(21). That regulation categorically excludes from environmental review "approvals of direct and indirect transfers of any license issued by the NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license," and the regulation reflects the NRC's finding that this category of action does not individually or cumulatively have a significant effect on the human environment.<sup>47</sup>

<sup>&</sup>lt;sup>42</sup> 42 U.S.C. § 2239(a)(1)(A) ("[I]n any proceeding under this Act, for . . . application to transfer control, . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.").

<sup>43</sup> See Streamlined Hearing Process for NRC Approval of License Transfers; Final Rule, 63 Fed. Reg. 66,721, 66,722 (Dec. 3, 1998) ("Subpart M Rule"); see also Changes to Adjudicatory Process; Final Rule, 69 Fed. Reg. 2182, 2214 (Jan. 14, 2004) (retaining streamlined process for license transfers without substantive changes).

<sup>&</sup>lt;sup>44</sup> See Subpart M Rule, 63 Fed. Reg. at 66,727.

<sup>&</sup>lt;sup>45</sup> 10 C.F.R. § 2.1315(a).

<sup>&</sup>lt;sup>46</sup> 10 C.F.R. § 2.1315(b).

<sup>&</sup>lt;sup>47</sup> See Subpart M Rule, 63 Fed. Reg. at 66,728.

### IV. CONTENTION ADMISSIBILITY STANDARDS

All contentions must meet the admissibility standards set forth in 10 C.F.R. § 2.309(f)(1). Specifically, contentions must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue;
- (vi) In a proceeding other than one under 10 CFR 52.103, provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

10 C.F.R. §§ 2.309(f)(1)(i)-(vi). These standards are enforced rigorously. "If any one . . . is not met, a contention must be rejected." 48

A Presiding Officer may not overlook a deficiency in a contention or assume the existence of missing information.<sup>49</sup> Under these standards, a petitioner "is obligated to provide

<sup>&</sup>lt;sup>48</sup> Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 N.R.C. 149, 155 (1991) (citation omitted); USEC, Inc. (American Centrifuge Plant), CLI-06-9, 63 N.R.C. 433, 437 (2006) ("These requirements are deliberately strict, and we will reject any contention that does not satisfy the requirements." (footnotes omitted)).

See, e.g., Palo Verde, CLI-91-12, 34 N.R.C. at 155; AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 N.R.C. 235, 260 (2009) (noting that the contention admissibility rules "require")

the [technical] analyses and expert opinion showing why its bases support its contention."<sup>50</sup>
Where a petitioner has failed to do so, the Presiding Officer "may not make factual inferences on [the] petitioner's behalf."<sup>51</sup>

Further, admissible contentions "must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]."<sup>52</sup> In particular, this explanation must demonstrate that the contention is "material" to the NRC's findings and that a genuine dispute on a material issue of law or fact exists. 10 C.F.R. § 2.309(f)(1)(iv), (vi). The Commission has defined a "material" issue as meaning one where "resolution of the dispute *would make a difference in the outcome* of the licensing proceeding."<sup>53</sup>

As the Commission has observed, this threshold requirement is consistent with judicial decisions, such as *Connecticut Bankers Ass'n v. Bd. of Governors*, 627 F.2d 245 (D.C. Cir. 1980), which held that:

[A] protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that "an 'inquiry in depth' is appropriate."<sup>54</sup>

the petitioner (*not the board*) to supply all of the required elements for a valid intervention petition" (emphasis added) (footnote omitted)).

Georgia Inst. of Tech. (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 N.R.C. 281, 305, vacated in part and remanded on other grounds, CLI-95-10, 42 N.R.C. 1, aff'd in part, CLI-95-12, 42 N.R.C. 111 (1995).

<sup>51</sup> Id. (citing Palo Verde, CLI-91-12, 34 N.R.C. 149). See also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 N.R.C. 142, 180 (1998) (explaining that a "bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;" rather, "a petitioner must provide documents or other factual information or expert opinion" "to show why the proffered bases support [a] contention" (citations omitted)).

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 N.R.C. 349, 359-60 (2001).

<sup>&</sup>lt;sup>53</sup> Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, Final Rule, 54 Fed. Reg. 33,168, 33,172 (Aug. 11, 1989) (emphasis added).

<sup>&</sup>lt;sup>54</sup> *Id.* at 33,171 (quoting *Conn. Bankers Ass'n*, 627 F.2d at 251). *See also Baltimore Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 N.R.C. 39, 41, *motion to vacate denied*, CLI-98-15,

A contention, therefore, is not to be admitted "where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts." As the Commission has emphasized, the NRC rules bar contentions where petitioners have what amounts only to generalized suspicions, hoping to substantiate them later, or simply a desire for more time and more information in order to identify a genuine material dispute for litigation. <sup>56</sup>

Rather, NRC's pleading standards require a petitioner to read the pertinent portions of the license application, state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant.<sup>57</sup> If the petitioner does not believe these materials address a relevant issue, the petitioner is "to explain why the application is deficient."<sup>58</sup> A contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal.<sup>59</sup> Furthermore, "an allegation that some aspect of a license application is 'inadequate' or 'unacceptable' does not give rise to a genuine dispute unless it is

48 N.R.C. 45, 56 (1998) ("It is the responsibility of the Petitioner to provide the necessary information to satisfy the basis requirement for the admission of its contentions.").

<sup>55 54</sup> Fed. Reg. at 33,171. See also Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 N.R.C. 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 N.R.C. 1041 (1983) ("[A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable [the petitioner] to uncover any information that could serve as the foundation for a specific contention. Stated otherwise, neither Section 189a of the [Atomic Energy] Act nor Section 2.714 [now 2.309] of the Rules of Practice permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.").

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 N.R.C. 419, 424 (2003).

<sup>&</sup>lt;sup>57</sup> 54 Fed. Reg. at 33,170-71; *Millstone*, CLI-01-24, 54 N.R.C. at 358.

<sup>&</sup>lt;sup>58</sup> 54 Fed. Reg. at 33,170. See also Palo Verde, CLI-91-12, 34 N.R.C. at 156.

See Texas Util. Elec. Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 N.R.C. 370, 384 (1992), vacated as moot and appeal dismissed, CLI-93-10, 37 N.R.C. 192, stay denied, CLI-93-11, 37 N.R.C. 251 (1993).

supported by facts and a reasoned statement of why the application is unacceptable in some material respect."60

# V. THE COMMONWEALTH HAS FAILED TO PUT FORTH AN ADMISSIBLE CONTENTION

#### A. The Commonwealth's Contention 1 Is Inadmissible

The Commonwealth's first contention, which challenges (a) the generic finding of no significant hazards consideration and (b) the sufficiency of the financial assurance in the Application (Pet. at 6), is inadmissible for multiple reasons. The challenge to the generic finding of no significant hazards consideration is barred as an impermissible challenge to the NRC rules. The challenges to the sufficiency of financial assurance are inadmissible because they lack an adequate basis, do not demonstrate material issues, and are not supported by sufficient information to demonstrate a genuine material dispute. Further, the Commonwealth's challenges to the PSDAR in Contention 1 represent impermissible challenges to the NRC rules and are beyond the scope of this proceeding.

# 1. The Commonwealth's Challenges to the Generic Finding of No Significant Hazards Consideration Are Barred

Contention 1 impermissibly challenges the NRC's generic finding of no significant hazards consideration. The Commonwealth asserts that "the LTA, Exemption Request, and the Revised PSDAR involve a potential significant safety hazard and environmental hazard because the Applicants have failed to present sufficient evidence to demonstrate that there will exist a reasonable assurance of adequate protection for public health and safety. . . ." Pet. at 6. The Commonwealth argues that the Commission may not allow the Application and exemption

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Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 N.R.C. 257, 358 (2005) (citing Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 N.R.C. 509, 521 & n.12 (1990)).

request before it holds a hearing on the issues raised in the Petition. *Id.* at 5. These claims attack the NRC's generic finding in 10 C.F.R. § 2.1315(a), which provides:

Unless otherwise determined by the Commission with regard to a specific application, the Commission has determined that any amendment to the license of a utilization facility or the license of an Independent Spent Fuel Storage Installation which does no more than conform the license to reflect the transfer action, involves respectively, "no significant hazards consideration," or "no genuine issue as to whether the health and safety of the public will be significantly affected."

This finding is included in the Notice.<sup>61</sup> The Commonwealth's challenge to the finding in 10 C.F.R. § 2.315(a) is barred by 10 C.F.R. § 2.335, which provides that except pursuant to a petition for waiver meeting specified standards, "no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material, is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding subject to this part." The Commonwealth has not submitted any petition for waiver or addressed the standards for a waiver request. The Commonwealth's challenge is also barred by 10 C.F.R. § 50.58(b)(6), which prohibits hearing requests from challenging a determination that an amendment involves no significant hazards consideration. Therefore, the Commonwealth's challenge to the no significant hazards determination is inadmissible.

Id.

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<sup>&</sup>lt;sup>61</sup> Notice, 84 Fed. Reg. at 817.

As provided in 10 CFR 2.1315, unless otherwise determined by the Commission with regard to a specific application, the Commission has determined that any amendment to the license of a utilization facility or to the license of an ISFSI, which does no more than conform the license to reflect the transfer action involves no significant hazards consideration. No contrary determination has been made with respect to this specific license amendment application. In light of the generic determination reflected in 10 CFR 2.1315, no public comments with respect to significant hazards considerations are being solicited, notwithstanding the general comment procedures contained in 10 CFR 50.91.

The Commonwealth asserts that the Application substantively amends the Pilgrim license by deleting a license condition that was imposed when Entergy acquired Pilgrim from Boston Edison Company, requiring ENGC to have access to a \$50 million contingency fund. Pet. at 5.62 To the extent that the Commonwealth may be suggesting that the generic finding of no significant hazards consideration in 10 C.F.R. § 2.1315(a) is therefore inapplicable, such argument is groundless. The requested amendment deleting this license condition is administrative in nature, because the proposed amendment to the license condition in question (part of Condition 3.J) merely conforms the license to reflect the proposed transfer, where Holtec Pilgrim and HDI are basing their financial qualifications on the adequacy of the NDT and are not relying on any parent support agreement or any other form of supplemental financial assurance to support their financial qualifications. In short, the amendment deletes a license condition that relates to a support agreement provided by Entergy<sup>63</sup> (which is extinguishing its interests in and responsibility for Pilgrim), and that is not part of the financial assurances that Holtec Pilgrim and HDI propose.

2. The Commonwealth's Challenges to the PSDAR Are Impermissible Challenges to the NRC Rules and Are Outside the Scope of the Proceeding

The Commonwealth's Petition makes various claims concerning the adequacy of the Revised PSDAR that are outside the scope of the proceeding and impermissible challenges to the

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The license condition is related to and confirms a support agreement that was provided when Entergy purchased Pilgrim from Boston Edison in 1999. As reflected in the NRC's safety evaluation approving the transfer of the Boston Edison's licenses to Entergy, Entergy International entered into an Inter-Company Credit Agreement with Entergy Nuclear, which obligates Entergy International to advance funds to ENGC in an aggregate amount not to exceed \$50 million for the purpose of providing financial assurance of sufficient funds for operation and maintenance of Pilgrim. Safety Evaluation by the Office of Nuclear Reactor Regulation, Proposed Transfer of Operating License and Materials License for Pilgrim Nuclear Power Station to Energy Nuclear Generation Company (Apr. 29, 1999) at 4,9 (ADAMS Accession No. ML011910099). Obviously, given the proposed sale of Entergy's interests in Pilgrim, and transfer of control of the Pilgrim licenses to Holtec, Entergy International would no longer provide this support.

<sup>63</sup> See id.

NRC rules. These include claims that the Revised PSDAR involves a potential significant safety hazard and environmental hazard (Pet. at 6), does not comply with 10 C.F.R. § 50.82(a)(8)(i)(B) and (C) (id. at 7), and does not comply with 10 C.F.R. § 50.75(h)(1)(iv) (id. at 7); and that "approving the LTA request effectively approves the Revised PSDAR and its financial and environmental analysis" (id. at 8).

The Commonwealth misunderstands the purpose of a PSDAR, which is "to provide a general overview for the public and the NRC of the licensee's proposed decommissioning activities until [two] years before termination of the license."<sup>64</sup> As the Commission explained in CLI-16-17, NRC regulations provide an opportunity for public comment when a licensee submits its PSDAR.<sup>65</sup> However, because "the PSDAR does not amend the license" or otherwise require formal NRC Staff approval, "[NRC] regulations do not provide a hearing opportunity on it."<sup>66</sup> Thus, to the extent that the Commonwealth seeks to contest the contents of the Revised PSDAR in this license transfer proceeding, it inappropriately challenges NRC regulations and raises issues outside the scope of the proceeding.<sup>67</sup> Any concerns related to the Revised PSDAR should be presented via the applicable NRC processes, including the PSDAR-specific public comment process and the rulemaking process.

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<sup>&</sup>lt;sup>64</sup> 1996 Decommissioning Rule, 61 Fed. Reg. at 39,281.

<sup>65</sup> See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-16-17, 84 N.R.C. 99, 104, 124 (2016).

Id. at 116 n.68, 124 (citing 10 C.F.R. § 50.82(a)(4)(ii); see 42 U.S.C. § 2239). In the 1996 rulemaking that expanded opportunities for public participation in the decommissioning process, the Commission explicitly rejected the idea of a hearing and intervention opportunity at the PSDAR review stage because "initial decommissioning activities (dismantlement) are not significantly different from routine operational activities . . . [and] do not present significant safety issues for which an NRC decision would be warranted." 1996 Decommissioning Rule, 61 Fed. Reg. at 39,284. It explained that "[a] more formal public participation process is appropriate at the termination stage of decommissioning." Id. At the license termination stage, the licensee must submit a license amendment request in order to terminate its license. Id. That request provides an opportunity for a hearing on the license termination plan. Id. at 39,284, 39,286.

<sup>&</sup>lt;sup>67</sup> See 10 C.F.R. §§ 2.309(f)(1)(iii), 2.335(a).

This does not mean that the Revised PSDAR is immaterial to the Application. The Revised PSDAR includes the DCE upon which the cash flow analysis in the Application and exemption request are based, along with the description of the decommissioning activities and schedule that HDI will undertake. The demonstration of financial qualifications and the exemption request presented in the Application are subject to scrutiny in this proceeding, informed by the Revised PSDAR. But nothing in the Application requests or requires the NRC to "approve" the Revised PSDAR or broadens the scope of the issues in this proceeding. The activities in the Revised PSDAR are activities that the NRC rules already allow. HDI and Holtec Pilgrim must demonstrate their financial qualifications to perform these permissible activities, but whether the Revised PSDAR involves a safety hazard, meets requirements, or demonstrates that decommissioning activities are bounded by prior environmental impact statements are beyond the scope of this proceeding.

3. The Commonwealth's Claims Regarding the Adequacy of Financial Assurance Are Baseless, Immaterial, and Fail to Demonstrate a Genuine Dispute with the Application

The Commonwealth makes numerous claims regarding the adequacy of the financial assurance in the Application, but those claims lack an adequate basis as required by 10 C.F.R. § 2.309(f)(1)(ii), do not demonstrate material issues as required by 10 C.F.R. § 2.309(f)(1)(iv), and are not supported by sufficient information to demonstrate a genuine material dispute with the Application as required by 10 C.F.R. § 2.309(f)(1)(vi). In particular, Contention 1 appears predicated on the Commonwealth's incorrect view that the level of financial assurance must address the possibility of a myriad of unforeseen conditions and expenses (*see* Pet. at 7, 13-15), amounting to a guarantee that the estimated costs of decommissioning and spent fuel management will not be exceeded (*see* Pet. at 17). The Commission has spoken directly to this issue, and explained that it does not require absolute certainty in licensees' financial projections:

[T]he level of assurance the Commission finds it reasonable to require regarding a licensee's ability to meet financial obligations is less than the extremely high assurance the Commission requires regarding the safety of reactor design, construction, and operation. The Commission will accept financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected. Thus, the casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance.<sup>68</sup>

Rather than requiring absolute financial assurance for every speculative contingency, the Commission has established a comprehensive and rigorous regulatory regime that provides continuous assurance that funding will remain adequate after a plant permanently ceases operation. This regime includes required annual reporting on the adequacy of decommissioning funding assurance, and adjustment if necessary, and restrictions on withdrawals from decommissioning trust funds to ensure the ability to fund a shortfall will not be inhibited.

The Commonwealth fails to address or dispute the adequacy of the NRC processes described in the Application for this annual review and where necessary adjustment of the funding assurance, as well as the further review of funding assurance at the LTP stage, and the reasonable funding assurance that this regulatory regime provides, given the substantial conservatism in cash flow analysis identified in the Application. The Application clearly states:

Pursuant to the annual reporting requirements in 10 CFR 50.82(a)(8)(v) - (vii), HDI will prepare and submit an annual report of the estimated costs to complete decommissioning and manage irradiated fuel, in addition to reporting the status of the PNPS NDT and the funding status for managing irradiated fuel. The DECON DCE adjusted for inflation, in accordance with applicable regulatory requirements, will be used to demonstrate funding assurance. If the remaining funds plus earnings do not cover the estimated cost to complete the decommissioning, the financial assurance status report will include additional financial assurance to cover the estimated cost of completion. If the accumulated funds for irradiated fuel management do not cover the projected cost, a plan to

<sup>&</sup>lt;sup>68</sup> N. Atl. Energy Serv. Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 N.R.C. 201, 221-22 (1999) (emphasis added).

obtain additional funds to cover the cost will be included in the funding status report.<sup>69</sup>

In addition, the NRC's rules prohibit withdrawals from the NDT if they would inhibit the ability to complete funding of any shortfalls needed to ensure the availability of funds to ultimately release the site and terminate the license.<sup>70</sup>

As the Commission has held, the strict oversight and reporting requirements in the NRC's decommissioning funding regulations provide reasonable assurance that funding will remain adequate, notwithstanding an exemption allowing a decommissioning trust to be used for spent fuel management and site restoration:

[E]ven after the Staff granted the exemption, the regulations still prohibit [the licensee] from making a withdrawal that would "inhibit its ability to complete funding of any shortfalls in the decommissioning trust," require [the licensee] to submit an annual financial assurance report, and require [the licensee] to provide additional funds if the report reveals insufficient funds to complete decommissioning. Therefore, the applicable regulations provide reasonable assurance that adequate funds will remain to complete decommissioning by requiring [the licensee] and the Staff to monitor the projected cost of decommissioning and available funding and ensure more funding is available as needed.<sup>71</sup>

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<sup>&</sup>lt;sup>69</sup> LTA, Encl. 2 at E-4. The DCE similarly states:

In accordance with 10 CFR 50.82(a)(8)(v), decommissioning funding assurance will be reviewed and reported to the NRC annually until residual radioactivity has been reduced to a level that permits termination of the licenses. The latest site-specific DCE adjusted for inflation, in accordance with applicable regulatory requirements, will be used to demonstrate funding assurance. In addition, actual radiological and spent fuel management expenses will be included in the annual report in accordance with applicable regulatory requirements. If the funding assurance demonstration shows the NDT is not sufficient, then an alternate funding mechanism allowed by 10 CFR 50.75(e) and the guidance provided in Regulatory Guide 1.159 (Reference 12) will be put in place.

DCE at 44. See also id. at 48.

<sup>&</sup>lt;sup>70</sup> 10 C.F.R. § 50.82(a)(8)(i)(C).

<sup>&</sup>lt;sup>71</sup> Vermont Yankee, CLI-16-17, 84 N.R.C. at 118.

The Commission similarly observed that a licensee is required to submit to the Staff annual reports regarding the status of its funding for irradiated fuel management, including a plan to obtain additional funds to cover any expected shortfalls.<sup>72</sup>

The comprehensive review performed when the LTP is submitted provides further assurance of adequate funding. As the Commission explained in the 1996 Decommissioning Rule,

The site characterization, description of the remaining dismantlement activities and plans for site remediation are necessary for the NRC to be sure that the licensee will have adequate funds to complete decommissioning and that the appropriate actions will be completed by the licensee to ensure that the public health and safety will be protected.<sup>73</sup>

The Commission reviews this information at the LTP stage including "the licensee's plans for assuring that adequate funds will be available for final site release," provides an opportunity both for public comment and for hearings, and approves the LTP only upon a determination that the remainder of decommissioning activities will be performed in accordance with the NRC rules, will not be inimical to the public health and safety, and will not have a significant effect on the quality of the environment. For Pilgrim, the LTP will be submitted at least two years before the expected date for partial site release, with partial site release expected to be completed by 2026.

The Commonwealth also fails to provide any genuine basis to dispute information in the Application showing that HDI and Holtec Pilgrim have substantial means to provide additional

<sup>75</sup> 10 C.F.R. § 50.82(a)(10).

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<sup>&</sup>lt;sup>72</sup> *Id.* at 105 n.13 (citing 10 C.F.R. § 50.82(a)(8)(vi)).

<sup>&</sup>lt;sup>73</sup> 1996 Decommissioning Rule, 61 Fed. Reg. at 39,289.

 $<sup>^{74}</sup>$  *Id*.

<sup>&</sup>lt;sup>76</sup> Revised PSDAR at 5, 14, 35.

<sup>&</sup>lt;sup>77</sup> *Id.* at 35.

financial assurance. In this regard, the Commonwealth does not meaningfully address or provide any basis to dispute the significant conservatism in the financial (cash flow) analyses demonstrating the ability of Holtec Pilgrim and HDI to fund decommissioning, spent fuel management and site restoration costs. As the Application states, "the annualized cash flows are conservative in that they do not take credit for any proceeds Holtec Pilgrim expects to recover from DOE through litigation or settlement of its claims for the spent fuel management costs it will incur as a result of the DOE's breach of its obligations to dispose of Pilgrim's spent nuclear fuel."<sup>78</sup> Indeed, the cash flow analysis in the Application shows that there is over \$500 million that HDI estimates it will incur for spent fuel management, <sup>79</sup> recovery of which Holtec Pilgrim can seek from DOE. As the NRC Staff recently observed in approving the license transfer application for Vermont Yankee,

[T]he NRC staff finds that the assumption of DOE reimbursement is a reasonable source of additional funding. In recent years DOE reimbursements have become more consistent and predictable despite the longevity of the litigation process and complexity of DOE standard settlement agreements.<sup>80</sup>

Thus, the 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. The Commonwealth does not dispute this

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<sup>&</sup>lt;sup>78</sup> LTA, Encl. 1 at 18.

<sup>&</sup>lt;sup>79</sup> See LTA, Encl. 1, Att. D (5<sup>th</sup> and 6<sup>th</sup> unnumbered pages) (Pilgrim Nuclear Power Station Decommissioning Cash Flow Analysis).

Safety Evaluation by the Office of Nuclear Reactor Regulation and Officer of Nuclear Material Safety and Safeguards Related to Request for Direct and Indirect Transfers of Control of Renewed Facility Operating License No. DPR-23 and the General License for the Independent Spent Fuel Storage Installation from Entergy Nuclear Operations, Inc. and Entergy Nuclear Vermont Yankee, LLC to NorthStar Vermont Yankee, LLC and NorthStar Nuclear Decommissioning Company, LLC, Vermont Yankee Nuclear Power Station (Oct. 11, 2018) at 15 (ADAMS Accession No. ML18242A639).

source of additional funds and thus fails to demonstrate any genuine material dispute with the financial qualifications of Holtec Pilgrim and HDI, or with the exemption request.

The Commonwealth does argue that a claim by Pilgrim's prior owner, Boston Edison, is likely to decrease the amount of money that Holtec Pilgrim may recover from DOE by approximately \$40 million. *See* Pet. at 11. Even if this were true (which it is not),<sup>81</sup> it would not raise any genuine material dispute with the Application, in light of the over \$500 million that can be claimed.

The Commonwealth also argues that Holtec has not committed to placing the funds it recovers from DOE on a recurring basis back into the NDT to cover ongoing costs and contingencies or to cover shortfalls. *See* Pet. at 26. This argument does not raise any material issue or demonstrate any genuine material dispute with the Application, because the NRC's decommissioning funding assurance rules require *annual* reporting of the status of funding, and adjustment where necessary.<sup>82</sup> Thus, if there were a shortfall in any year, Holtec Pilgrim would have the ability (and NRC could direct it) to make additional contributions to the NDT or provide one of the other acceptable means of providing funding assurance (such as a providing a surety bond or parent guarantee), and the continuing, long-term recovery of spent fuel costs would provide an available source. There is simply no need at this juncture to commit to placing all DOE recoveries back in the NDT, and no such requirement in the NRC rules.

Further, because the decommissioning, restoration, and release of all portions of the site other than the ISFSI ("partial site release") will be completed expeditiously by 2026 under the

The Commonwealth suggests that Applicants have not provided complete and accurate information by failing to disclose the potential future claim that Boston Edison might make against future litigation or settlements. Pet. at 9, 11-12. As DOE recoveries were not credited in the cash flow analyses and the Boston Edison claim is less than 10% of the \$500 million that Holtec Pilgrim could seek to recover, the Boston Edison claim would not be material even if it had the ability to reduce Holtec Pilgrim's recovery.

<sup>82 10</sup> C.F.R. § 50.82(a)(8)(v)(A)-(B).

DECON method selected by HDI – and the LTP submitted at least two years earlier will contain the site characterization, plans for the remaining work and final survey, and the updated cost estimate – any need for additional funding to complete decommissioning will be known soon. Therefore, any need for funds from continuing DOE recoveries will also be known soon and can be addressed then by HDI, Holtec Pilgrim and the NRC as necessary. Even upon completion of partial site release, leaving only the ISFSI to be decommissioned, the cash flow analysis in the Application shows about \$277 million in estimated spent fuel costs (from 2026 through 2063), recovery of which from DOE would provide a considerable, continuing source of funds if there were a need to adjust funding assurance. In short, the Commonwealth provides no basis to question the ability of Holtec Pilgrim and HDI to adjust funding assurance if necessary and does not raise any genuine dispute with the demonstration of financial qualifications in the Application.

Moreover, even without credit for DOE recoveries, the cash flow analysis shows over \$200 million remaining in the fund in 2026,<sup>83</sup> after partial site release, belying the Commonwealth's claim that there is a "very real possibility of a shortfall in the Trust Fund before the site is radiologically decontaminated and restored" (Pet. at 42).

The Commonwealth's failure to meaningfully address and demonstrate any genuine material dispute with the conservatism identified and relied upon in the Application (*i.e.*, the expected recovery of spent fuel management costs not credited in the cash flow analysis) is sufficient grounds by itself to dismiss all of the allegations in Contention 1. Nevertheless, as discussed below, all of the Commonwealth's claims purportedly in support of Contention 1 also lack adequate support and fail to raise any genuine material dispute with the Application.

<sup>83</sup> See LTA, Encl. 1, Att. D (5<sup>th</sup> and 6<sup>th</sup> unnumbered pages) (Pilgrim Nuclear Power Station Decommissioning Cash Flow Analysis).

All of the Commonwealth's claims are based on the Commonwealth's incorrect assertions that the Application and exemption request "fail to comply with 10 C.F.R. § 50.82(a)(8)(i)(B) and (C)" and do not comply with 10 C.F.R. § 50.75(h)(1)(iv). See Pet. at 7, 24. The Commonwealth asserts that 10 C.F.R. § 50.82(a)(8)(i)(B) and (C) "explicitly require licensees to maintain a level of financial assurance and utilize decommissioning funds in a manner that is sufficient to protect public health, safety, and the environment in the event 'unforeseen conditions or expenses arise." *Id.* at 7.84 Contrary to the Commonwealth's characterization, 10 C.F.R. § 50.82(a)(8)(i)(B) and (C) only restrict withdrawals from a decommissioning trust and do not relate to the level of financial assurance that must be provided or impose a requirement that a decommissioning trust have sufficient funds to account for unforeseen conditions or expenses. As previously discussed, the possibility of unforeseen expenses is addressed by the Commission's rules at 10 C.F.R. § 50.82(a)(8)(v)-(vii), which require annual reporting and adjustment to funding assurance at that time if a shortfall is identified. To the extent that the Commonwealth is seeking assurances beyond that required by the NRC rules, its claims constitute an impermissible challenge to those rules.

Moreover, 10 C.F.R. § 50.82(a)(8)(i)(B) and (C) demonstrate that there is no material safety concern raised by the Commonwealth's allegations. Those regulations prohibit withdrawals from an NDT if they would reduce the value of the trust below the amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise, or if they would inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately

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See also Pet. at 13 ("The LTA, Exemption Request, and Revised PSDAR also fail to comply with 10 C.F.R. § 50.82(a)(8)(i)(B) and (C) because . . . there are multiple ways that Holtec could experience significant, unaccounted for, cost overruns.").

release the site and terminate the license. Consequently, if some highly unlikely unforeseen event were to inhibit HDI's ability to fund the completion of DECON, these rules would require that Pilgrim be placed in SAFSTOR condition until such funding could be assured.

The Commonwealth's reliance on 10 C.F.R. § 50.75(h)(1)(iv) (Pet. at 24) is similarly misplaced. 10 C.F.R. § 50.75(h)(1)(iv) is not even applicable to Pilgrim, because Pilgrim's license has conditions governing the NDT and is therefore grand-fathered pursuant to 10 C.F.R. § 50.75(h)(5). In any event, the Commonwealth's concerns appear to be that (1) because the exemption request in the Application has not yet been granted, the Application violates NRC requirements (see Pet. at 24), and (2) the Commonwealth is entitled to a hearing on the exemption because it is directly related and inextricably intertwined with the license transfer (id. at 25). Neither of these concerns raises a material issue or demonstrates a genuine material dispute with the Application, because the exemption request is in fact part of the Application.<sup>85</sup> Thus, the Application recognizes that an exemption is needed as part of the approval of the Application and in no way restricts the Commonwealth's ability to challenge the exemption request in its hearing request (which is effectively the same as challenging Holtec Pilgrim's financial qualifications, as they are based on exactly the same cash flow analysis). Further, it goes without saying that if the exemption request is granted, HDI's and Holtec Pilgrim's reliance on the NDT to provide funding assurance for spent fuel management (as well as site restoration) and to demonstrate their financial qualifications will not violate any regulation or restriction.

There is also no merit to the Commonwealth's argument that Entergy's and Holtec's proposal to delete the license condition requiring Entergy to provide the \$50 million contingency

<sup>&</sup>lt;sup>85</sup> See LTA, Encl. 2. See also LTA, Encl. 1 at 17 ("The HDI plan is to fund spent fuel management as required by 10 CFR 50.54(bb) following permanent cessation of operations using the NDT, pursuant to the NRC's approval of an exemption from 10 CFR 50.82(a)(8)(i)(A), which HDI is submitting as part of this Application.") (emphasis added).

fund, allegedly "without any mention or justification in the LTA whatsoever" (Pet. at 10), constitutes an omission that "in and of itself" justifies a hearing (*id.* at 11). Contrary to Commonwealth's assertion, the Application clearly states:

[T]he Applicants request that the NRC approve a conforming administrative amendment to the Licenses to reflect the proposed direct transfer of the Licenses from ENOI to HDI; a planned name change for ENGC from ENGC to Holtec Pilgrim, LLC; and deletion of certain license conditions to reflect satisfaction and termination of all ENGC obligations after the license transfer and equity sale.<sup>86</sup>

The Application further stated, "These administrative changes . . . are shown in Attachment A to this enclosure." Thus, the proposed amendment was clearly identified and justified as reflecting the termination of Entergy's previous obligations after the license transfer. In any event, simply referring to the completeness and accuracy rule in 10 C.F.R. § 50.9 does not satisfy the Commission's strict contention requirements. The Commonwealth must demonstrate that its concerns are material and present a genuine dispute with the Application. As the Commission has held, when a license transferee has demonstrated compliance with the NRC's financial qualifications regulations, parental support is supplemental information and not material to the financial qualifications determination. Absent a shortfall in revenue predictions, the adequacy of a corporate parent's supplemental commitment is not material to the license transfer decision. Therefore, any contention focusing on HDI's and Holtec Pilgrim's financial

<sup>&</sup>lt;sup>86</sup> LTA, Cover Letter at 1, and Encl. 1 at 1 (emphasis added).

<sup>87</sup> *Id.*, Encl. 1 at 1.

<sup>&</sup>lt;sup>88</sup> The Commonwealth also argues that the failure to identify Boston Edison's DOE claim is an omission justifying a hearing. Pet. at 11-12. As previously discussed, there is no merit to this claim. *See supra* note 81 and accompanying text.

Wermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 N.R.C. 151, 175 (2000). See also Power Authority of the State of New York (James A. Fitzpatrick Nuclear Power Plant; Indian Point Unit 3), CLI-00-22, 52 N.R.C. 266, 300 (2000)

GPU Nuclear Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 N.R.C 193, 205 (2000); Consol. Edison Co. of New York (Indian Point, Units 1 and 2), CLI-01-19, 54 N.R.C. 109, 139 (2001).

qualifications must focus on and demonstrate a genuine material dispute with the cash flow analyses in the Application.

The remainder of the Commonwealth's allegations in Contention 1 all represent conclusory speculation that unanticipated costs could result in a shortfall detrimentally affecting public health and safety and the environment. *See* Pet. at 13. According to the Commonwealth, these unanticipated cost could result from (1) the possibility of delays in work schedule, (2) the possibility of unaccounted-for costs of compliance with Massachusetts standards for non-radiological hazardous materials cleanup, (3) the possibility of discovery of unknown radiological or non-radiological contamination, (4) the possibility of a radiological incident at the site, (5) the possibility that DOE may require repackaging of spent nuclear fuel into new containers, (6) the possibility that DOE may recover all or some of its past payments for the packaging of spent fuel into dry casks, (7) the possibility that HDI might not secure permission to dispose of Class B and C waste with the Texas Compact Commission, and (8) the possibility that DOE fails to remove all spent fuel by 2062. *Id.* at 13-15, 18.

None of these claims is sufficiently supported, particularly when viewed through the lens of the Commission's strict contention admissibility criteria. As an initial matter, all of these claims, while drawn from the Commonwealth's proffered affidavits, are on their face speculative and conclusory. The Commission has held that "an expert opinion that merely states a conclusion . . . without providing *a reasoned basis or explanation* for that conclusion is inadequate because it deprives the [presiding officer] of the ability to make the necessary, reflective assessment of the opinion" as it is alleged to provide a basis for the contention. 91 Such is the case here.

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<sup>&</sup>lt;sup>91</sup> USEC, Inc. (Am. Centrifuge Plant), CLI-06-10, 63 N.R.C. 451, 472 (2006) (emphasis added) (quoting Private Fuel Storage, LBP-98-7, 47 N.R.C. at 181).

A petitioner, including its proffered experts, must explain the significance of any factual information upon which it relies, particularly as it relates to the application in question. The Commonwealth and its experts miss the mark in this respect too. Specifically, they fail to explain how the alleged sources of potential cost overruns apply specifically to Pilgrim, how they are unaccounted for in the Applicants' cost estimates, and why they could result in a significant shortfall in decommissioning funding, especially in light of the comprehensive NRC oversight, which includes requirements for annual review and adjustment, if necessary of funding assurance, and prohibits withdrawals from nuclear decommissioning funds that would inhibit the ability of the licensee to complete funding of shortfalls necessary to ensure the availability of funds to release the site. Almost all of the postulated sources of potential cost overruns cited by the Commonwealth could apply to any decommissioning power reactor. Nor, as already discussed, do they provide any demonstration that Holtec Pilgrim could not adjust funding if necessary.

Finally, the Commonwealth's self-evident assertion that a decommissioning estimate is "not a guarantee" (Pet. at 17) is not grounds for an admissible contention. As previously discussed, the Commission does not require absolute certainty in licensees' financial projections, but instead accepts financial assurances based on plausible assumptions and forecasts. "Thus, the casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance." The Commonwealth has furnished no information showing that Applicants' cost projections rely on implausible assumptions or forecasts.

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<sup>&</sup>lt;sup>92</sup> See Fansteel, Inc. (Muskogee, Okla., Site), CLI-03-13, 58 N.R.C. 195, 204-05 (2003) (rejecting a contention regarding decommissioning funding assurance where petitioner relied on its brief reference to applicant's "Disclosure Statement and Reorganization Plan" without explaining how that document undermined the applicant's assurance of funding).

<sup>93</sup> Seabrook, CLI-99-6, 49 N.R.C. at 221-22.

<sup>&</sup>lt;sup>94</sup> *Id*.

### a. The Possibility of Delays in Work Schedule

With respect to the Commonwealth's reference to potential delays in work schedule (Pet. at 13), the Commonwealth does not provide any meaningful quantification of the impact of a potential delay in work schedule, or reason to believe that such a delay at Pilgrim is likely. The Commonwealth identifies paragraphs 8 and 9 of the declaration of Mr. Brewer's declaration, where Mr. Brewer states (without specific references) that the estimated staff costs (in 2010 dollars) for the decommissioning of Humboldt Bay Unit 3 increased from \$107.6 million in a 2006 TLG Report to \$168 million after the start of the project. *See* Pet. at 13; Brewer Decl., \$\mathbb{P}\$ 9. Neither the Commonwealth nor Mr. Brewer demonstrate the materiality of this statement, nor any apparent applicability to Pilgrim. The Decommissioning Project Report for Humboldt Bay Power Plant Unit 395 explains the reasons for the schedule impacts on staffing.

Several assumptions were changed between the 2005 and 2009 estimates. First, PG&E commissioned a project to construct the [Humboldt Bay Generating Station "(HBGS")] on the site to replace the aging fossil units. Second, PG&E decided to demolish Units 1 and 2 and sell the two combustion jet engine generating units. The sequence includes construction of HBGS followed by removal of the fossil units. Limited Unit 3 decommissioning was scheduled to proceed until demolition of Units 1 and 2 had been completed. This sequence allowed for continued reliable generation of electricity for the local area; expanding laydown areas for Unit 3 demolition onto the removed Units 1 and 2 footprint; and providing time to prepare Unit 3 with a Radwaste processing area. After demolition of Units 1 and 2, preparation of Unit 3, and full decommissioning of Unit 3 was undertaken. 96

Thus, the schedule impacts at Humboldt Bay to which Mr. Brewer refers appear related to the construction of new generation and demolition of other fossil units and have no relevance to the decommissioning of Pilgrim.

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Decommissioning Funding Report for Humboldt Bay Power Plant, Unit 3 (April 1, 2013), Encl. 4 (ADAMS Accession No. ML13093A028)

<sup>&</sup>lt;sup>96</sup> *Id.*, Encl. 4 at 18. The report also indicates that the 2005 estimate occurred prior to the intensive planning process in advance of decommissioning. *See id.* at 15 ("*In 2008 and 2009*, PG&E began an intensive planning and preparation phase in advance of beginning the decommissioning process.") (emphasis added).

Moreover, the DCE includes a 17 percent contingency allowance that has been added to the license termination (radiological decommissioning), site restoration and spent fuel management cost estimates (with the exception of the cost estimate for ISFSI decommissioning, to which a 25% contingency allowance is added). This amounts to approximately \$165 million in contingency. Therefore, in addition to the substantial conservatism provided by not crediting any DOE recoveries in the cash flow analysis, there is also considerable conservatism in the DCE. The large contingency allowance was developed rigorously, as described in the DCE, to address both uncertainty in estimates (such as uncertainty in site conditions, complexity of the project, pricing, and schedule), as well as the risk of discrete events.

Likely recognizing that this large contingency allowance belies the Commonwealth's concerns regarding delays (as well as uncertainties), the Commonwealth attempts to dismiss it, arguing that the contingency allowance is suspect because, while it accounts for uncertainties and risks beyond the contingency allowance in Entergy's cost estimate, the license termination costs are essentially equal when the costs of SAFSTOR in the Entergy estimate are excluded. Pet. at 22; Brewer Decl., § 8. Rather than calling HDI's contingency allowance into question, this comparison of HDI's estimate of license termination costs with Entergy's (which the Commonwealth admits included contingency which follows "standard practice" (Pet. at 22) supports the reasonableness of and conservatism of the DCE. Putting contingency aside, one would expect HDI's estimate of decommissioning costs to be lower than Entergy's because of the lower cost structure of a decommissioning contractor. Further, one would expect less

<sup>&</sup>lt;sup>97</sup> DCE at 41.

Id. at 39-41. The Application also states that "[f]or large contracts, the selected contractors, including affiliates, will be required to post performance bonds (or insurance where appropriate) issued by Treasury-rated surety companies to guarantee performance of work scope to ensure the work is performed at specified costs." LTA, Encl. 1 at 18. The Commonwealth does not explain why this contracting approach would be insufficient to control the costs of major items of work.

uncertainty in estimates of license termination costs for a DECON project where significant pricing has been confirmed, compared to license termination costs projected after a lengthy storage period. Logically, then, one would expect HDI's estimate with contingency to be lower than Entergy's. That they are comparable simply demonstrates that HDI's contingency is adequate, and the estimate on which financial assurances are based is conservative.

The Commonwealth also argues that the contingency allowance is not an allowance at all, because it is expected to be fully consumed. Pet. at 22, quoting DCE at 22. The DCE, however, clearly states that the contingency allowance is established based on evaluation of the impact of both uncertainty and discrete risk events on cost and schedule, to quantify schedule and cost reserves. The statement that the contingency allowance is expected to be fully consumed simply means that some of these uncertainties will probably materialize and therefore the projected expenditures in the DCE (and cash flow analysis) include an appropriate level of contingency to take such unforeseen impacts on cost and schedule into account. It does not mean that they are unaccounted for. The Commonwealth seems to be criticizing the LTA, Exemption Request and Revised PSDAR for failing assume that potential cost overruns may occur (*see, e.g.*, Pet. at 13), and then criticizing the DCE for including a contingency allowance that does just that.

Moreover, the assumption that the contingency allowance will be expended is very common and included in numerous decommissioning cost estimates provided to the NRC. <sup>100</sup>

<sup>&</sup>lt;sup>99</sup> DCE at 36, 39. Estimate uncertainties takes into account factors such as uncertainty in expected site conditions, stakeholder/regulatory requirements, complexity, productivity, pricing, and similar factors. *Id.* at 40.

See, e.g., Updated Site-Specific Decommissioning Cost Estimate for the Crystal River Unit 3 Nuclear Generating Plant (May 2018) at xi (ADAMS Accession No. ML18178A181); Fort Calhoun Station, Site Specific Decommissioning Cost Estimate (Feb. 2017) at xii (ADAMS Accession No. ML17089A759); Decommissioning Cost Analysis for the Oyster Creek Nuclear Generating Station (March 2016) at xii (ADAMS Accession No. ML16090A067); Vermont Yankee Nuclear Power Station, Site Specific Decommissioning Cost Estimate (Dec.

Indeed, the contingency allowance in Entergy's site-specific decommissioning cost estimate for Pilgrim, which the Commonwealth acknowledges "follows standard industry practice" (Pet. at 22), makes this same assumption.<sup>101</sup>

In any event, the Commonwealth fails to demonstrate that its concern with schedule delays is in any way material to the adequacy of the NDT to fund completion of decommissioning. As previously stated, even if the contingency allowance is fully consumed, the cash flow analysis in the Application shows that over \$200 million will remain in the trust after completion of partial site release (*i.e.*, after decommissioning all of the site other than the ISFSI). Further, it bears repeating that the Commonwealth ignores the much greater conservatism identified in the Application, which is Holtec Pilgrim's ability to seek recovery from DOE of about \$500 million in spent fuel management costs, while not taking credit for any such recoveries in its cash flow analysis. Consequently, the Commonwealth does not

<sup>2014)</sup> at xii (ADAMS Accession No. ML14357A110); Decommissioning Cost Analysis for Three Mile Island Unit 2 (Dec. 2014) at x (ADAMS Accession No. ML15086A337); Decommissioning Cost Analysis for the Zion Nuclear Power Station (Feb. 2007) at x (ADAMS Accession No. ML090750564); Millstone Nuclear Power Station Unit No. 1 Irradiated Fuel Management Plan and Site-Specific Decommissioning Cost Estimate (July 17, 2000), Attachment 2 at viii (ADAMS Accession No. ML003733809); Decommissioning Cost Study for the Humboldt Bay Power Plant Unit 3, 2006 SAFSTOR (Feb. 2002) at ix (ADAMS Accession No. ML041240049). As indicated in the Revised PSDAR, the DCE was prepared using an international structure for decommissioning cost estimation developed by the OECD, NEA, IAEA and EC. Revised PSDAR at 7. As discussed in OECD guidance:

There is inconsistent use of terms in the literature concerning "contingency" and "uncertainty" . . . In this guide by the term contingency we address "potential increases in the defined cost of an activity item and is specific to that item" (NEA, 2012). When such increases occur these are mainly due to typical events during the work activities (tool or equipment breakdowns, delays, inclement weather, etc.) and the novelty of some of the tasks. Using this definition of contingency, it is expected that contingency funds will be fully spent during the project.

OECD, The Practice of Cost Estimation for Decommissioning of Nuclear Facilities (2015) at 16, available at <a href="http://www.oecd-nea.org/rwm/pubs/2015/7237-practice-cost-estimation">http://www.oecd-nea.org/rwm/pubs/2015/7237-practice-cost-estimation</a> (emphasis added).

Pilgrim Nuclear Power Station, Post-Shutdown Decommissioning Activities Report Prepared on Behalf of Entergy Nuclear Generation Company by TLG Services (Nov. 2018), Att. 1 (PNPS Site-Specific Decommissioning Cost Estimate) (ADAMS Accession No. ML18320A034) ("Contingency funds are expected to be fully expended throughout the program. As such, the inclusion of contingency is necessary to provide assurance that sufficient funding will be available to accomplish the intended tasks.").

demonstrate that its concern with schedule delays or its dismissal of the substantial contingency allowance is in any way material.

b. The Possibility of Unaccounted-for Costs of Compliance with Massachusetts Standards for Non-radiological Hazardous Materials Cleanup

The Commonwealth's reference to the possibility of unaccounted-for costs of compliance with the Commonwealth standards for non-radiological hazardous materials cleanup (Pet. at 13) is immaterial, unsupported, and fails to demonstrate any genuine material dispute with the Application. First, the possibility of unaccounted for costs related to the cleanup of non-radiological materials is relevant only to the extent to which such costs might affect the cash flow analysis, and hence the ability to complete decommissioning and spent fuel management. Since the NRC rules prohibit any withdrawal from the NDT that would inhibit the ability of the licensee to complete the funding of any shortfalls or inhibit the completion of decommissioning, <sup>102</sup> there is no apparent way that unaccounted non-radiological costs could affect the funding assurance for decommissioning. <sup>103</sup> Nor, when DOE recoveries are considered, is there any way such costs could prevent completion of spent fuel management activities.

Therefore, the Commonwealth fails to demonstrate the materiality of this concern.

In any event, the Application states that:

HDI used Pilgrim Nuclear Power Station plant data and historical information obtained from ENOI in addition to the input and professional judgment of experienced decommissioning, demolition and waste management specialty subcontractors and subject matter experts (SMEs). This estimate is based on

<sup>&</sup>lt;sup>102</sup> See 10 C.F.R. § 50.82(a)(8)(i)(C).

<sup>&</sup>quot;[T]he NRC does not presume that a licensee will violate agency regulations wherever the opportunity arises." Private Fuel Storage, L.L.C. (Indep. Spent Fuel Storage Installation), CLI-01-9, 53 N.R.C. 232, 235 (2001). See also GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 N.R.C. 193, 207 (2000) ("NIRS also fails to offer documentary support for its argument that AmerGen is likely to violate our safety regulations. Absent such support, this agency has declined to assume that licensees will contravene our regulations.").

regulatory requirements, *site conditions*, basis of estimate assumptions, low-level radioactive waste disposal standards, high-level radioactive waste management options, *and site restoration requirements*. <sup>104</sup>

As the Revised PSDAR indicates, the decommissioning estimate was prepared using sources including "[i]nformation compiled by HDI and CDI *during an extensive due diligence period.*" The Commonwealth does not address or dispute this information in the Application, and neither the Commonwealth nor its affiants offer anything but vague speculation that there might be unaccounted for costs of hazardous materials cleanup. The Commonwealth's affiant, Mr. Howland, indicates that the discovery of PCB-contaminated materials at Yankee Rowe increased cleanup costs, but makes no effort to quantify this impact or demonstrate a potential for a material impact at Pilgrim. In this regard, the DCE states that the Pilgrim "decommissioning cost estimate for license termination, spent fuel management and site restoration activities [was compared] to costs from similar activities from seven decommissioned BWR nuclear power plants." In contrast, the Commonwealth provides no information indicating that HDI's estimate of site restoration costs is out of line with experience at other plants.

<sup>&</sup>lt;sup>104</sup> LTA, Encl. 1, Att. D (2<sup>nd</sup> unnumbered page). See also DCE at 7, 36-37, 48.

<sup>&</sup>lt;sup>105</sup> Revised PSDAR at 18 (emphasis added).

impact the duration and scheduling of license termination activities..."); Howland Decl., ¶ 7 ("MassDep is unable to determine if Holtec can perform the non-radiological clean up and site restoration work outlined generally in its PSDAR without signification cost overruns."); Locke Decl., ¶ 7 (the Revised PSDAR "is, in my opinion, deficient because it does not include an inventory of oil and hazardous materials that may have been used at the facility and which may have been released to the surrounding environment."). Note that Locke admits that "[p]ast environmental site assessments conducted for releases of oil and hazardous material at Pilgrim . . . are not indicative of potential contamination present." Locke Decl., ¶ 9.

<sup>&</sup>lt;sup>107</sup> See Howland Decl.. ₱ 5.

<sup>&</sup>lt;sup>108</sup> DCE at 37.

c. The Possibility of Discovery of Unknown Radiological or Non-radiological Contamination

The Commonwealth's reference to the possibility of discovery of unknown radiological or non-radiological contamination (Pet. at 13-14) is based on nothing more than conclusory speculation and demonstrates no genuine material dispute with the Application. The possibility of non-radiological contamination is not within the NRC's jurisdiction. Nor as previously discussed is it material to the adequacy of the nuclear decommissioning fund to complete decommissioning, because the NRC rules would prohibit any withdrawal from the fund for site restoration if the withdrawal would inhibit Holtec Pilgrim's ability to fund a shortfall in the funding for decommissioning.

Regarding the possibility of unknown radiological contamination, the gravamen of the Commonwealth's concern appears to be that a complete site characterization has not been performed (Pet. at 13, 17), but this concern once more ignores information in the Application and DCE indicating that the DCE was prepared after extensive due diligence, and considering plant and historic data, and site conditions. Further, the Commonwealth fails to explain why the NRC's record-keeping, monitoring and reporting requirements are insufficient (and to the extent the Commonwealth is suggesting that they are not, the Commonwealth appears to be impermissibly challenging the NRC rules). Those rules require a licensee to maintain:

Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when significant contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations. 110

<sup>&</sup>lt;sup>109</sup> See supra notes 104-105.

<sup>&</sup>lt;sup>110</sup> 10 C.F.R. § 50.75(g)(1).

This provision in the NRC rules is specifically intended to prevent incomplete knowledge that might result in underestimation of decommissioning costs.<sup>111</sup> The Commonwealth also ignores the NRC's Decommissioning Planning Rule, which requires *inter alia* licensees to conduct surveys of areas, including the subsurface, that are reasonable to evaluate concentrations or quantities of residual radioactivity, and to maintain the records from surveys describing the location and amount of subsurface residual radioactivity identified at the site with the records important to decommissioning required by 10 C.F.R. § 50.75(g).<sup>112</sup> This rule is intended to ensure that a licensee has a reasonably accurate estimate of the extent to which residual radioactivity is present at the facility, particularly in the subsurface soil and groundwater, to improve decommissioning planning and adequately ensure that a decommissioning fund will cover the costs of decommissioning.<sup>113</sup>

Further, even before the NRC's Decommissioning Planning Rule was promulgated,
Pilgrim was monitoring groundwater pursuant to an industry Ground Water Protection Initiative.
Currently, a total of 23 wells are being sampled on a routine basis, as reported in Pilgrim's most recent Annual Radioactive Effluent Release Report.<sup>114</sup>

The Commonwealth does not address or dispute this existing, docketed information on current subsurface conditions and for this reason too fails to demonstrate any genuine material dispute with the Application. As previously noted, a petitioner has a strict obligation to examine

General Requirements for Decommissioning Nuclear Facilities, Final Rule, 53 Fed. Reg. 24,018, 24,026 (June 27, 1988).

<sup>&</sup>lt;sup>112</sup> 10 C.F.R. § 20.1501.

Decommissioning Planning; Final Rule, 76 Fed. Reg. 35,512, 35,514 (June 17, 2011) ("Decommissioning Planning Rule"). "The purpose of this final rule is to improve decommissioning planning and thereby reduce the likelihood that a site will become a legacy site . . .", *i.e.*, "a facility that is decommissioning and has an owner that cannot complete the decommissioning work for technical or financial reasons." *Id.* at 35,516.

Annual Radioactive Effluent Release Report for January 1 through December 31, 2017 (May 15, 2018) (ADAMS Accession No. ML18141A428).

the publicly-available documentary material pertaining to the facility to ascertain whether there is a basis for its contentions. 115

Indeed, the Commonwealth and its affiants provide no concrete and site-specific information indicating that Applicants have overlooked significant sources of radiological or non-radiological contamination<sup>116</sup> at the Pilgrim site. Nor have they shown that such alleged oversights would cause site remediation and restoration costs to exceed HDI's cost estimates.

Similarly, because the Commonwealth and its affiants have not "shown how the identified contaminants will elevate decommissioning costs," they have not demonstrated that the cash flow analysis in the Application is based on "unreasonable assumptions." In particular, Mr. Priest, who is the only Commonwealth affiant who discusses radiological contaminants at Pilgrim, states that in 2010, tritium was measured in one well (Priest Decl., ¶ 8), but he does not provide any indication of its significance or explanation of why it would impact the DCE. Mr. Priest states that to the extent that tritium is discovered in excess of the drinking water maximum contaminant level ("MCL"), Holtec will have to ensure remediation. *Id.* The MCL corresponds to a 4 millirem standard, <sup>118</sup> far below the 25 millirem standard for unrestricted release established in the NRC rules. <sup>119</sup> Thus, Priest's statement that further remediation would be required impermissibly challenges the NRC rules. <sup>120</sup>

<sup>&</sup>lt;sup>115</sup> See supra note 55.

The Commonwealth cites Locke Decl. ¶ 6 and Howland Decl. ¶ 7 in support of an assertion that "it is likely that large quantities of non-radiological hazardous materials have been released at the site." Pet. at 35. Neither of the affiants makes such a statement.

<sup>&</sup>lt;sup>117</sup> Vermont Yankee, CLI-16-17, 84 N.R.C. at 118-19.

The EPA's safe drinking water standard for tritium is a 20,000 pCi/l maximum contaminant level ("MCL") that would produce a total body or organ dose of 4 millirem/year. *See* Interim Primary Drinking Water Regulations, 41 Fed. Reg. 28,402, 28,404 (July 9, 1976).

<sup>&</sup>lt;sup>119</sup> 10 C.F.R. § 20.1402.

<sup>&</sup>lt;sup>120</sup> In any event, Mr. Priest does not identify any current tritium measurement in excess of the MCL. As reflected in the most recent Annual Radioactive Effluent Release Report, all measurements of tritium in groundwater in 2017

Mr. Priest refers vaguely to a few other instances of contamination (Priest Decl., ¶ 9), but again makes no attempt to demonstrate their significance. Instead, he merely states that the Commonwealth does not know whether this information was captured by the decommissioning records required by 10 C.F.R. § 50.75(g). *Id.* Such lack of knowledge does not demonstrate any genuine material dispute. Mr. Priest states that "[1]ong-lived radionuclides are likely to be found in soils and groundwater far from the small excavation made to repair leaks that likely allowed reactor condensate to enter site soils for many years." Priest Decl., ¶ 10. Mr. Priest provides absolutely no basis for this statement – no basis for asserting that the presence of long-lived radionuclides is likely, no basis for asserting that leakage occurred for many years, and no basis assuming that levels of radionuclides in soil are not reasonably known or would affect the decommissioning costs estimate.

Finally, Mr. Priest states that Maine Yankee and Connecticut Yankee uncovered long half-life radionuclides in soils, and that "[s]imilar contaminants can be expected at the Pilgrim property, including carbon-14, nickel-63, strontium-90, cesium-137 and transuranics, which include radioisotopes of plutonium, curium, neptunium, and americium." Priest Decl. ¶ 11. Again, Mr. Priest provides absolutely no basis for asserting that similar contaminants can be expected, or that even if some were, that the levels would materially affect the DCE.

were below the MCL. Annual Radioactive Effluent Release Report for January 1 through December 31, *supra* note 114, at Appendix B. The report showed concentrations of tritium detected in the onsite wells in 2017 ranging from non-detectable at less than 229 pCi/L, up to a maximum concentration of 6,030 pCi/L (*id.* at 70) – well below the drinking water standard. *See also* Mass. Department of Public Health, Pilgrim Nuclear Power Station Tritium Groundwater Investigation Update (May 1, 2018) (summarizing tritium measurements), available at <a href="https://www.mass.gov/files/documents/2018/11/30/pnps-may-1-2018-update.pdf">https://www.mass.gov/files/documents/2018/11/30/pnps-may-1-2018-update.pdf</a>.

In 2018, a leak occurred in a feedwater check valve, and migrated into groundwater through the seismic gap between the reactor building and turbine building, resulting in elevated levels of tritium in one of the monitoring wells reaching about twice the MCL. The leak was identified and repaired, and the levels of tritium in the monitoring well have returned to concentrations that are a fraction of the MCL. This will be reflected in the Annual Radioactive Effluent Release Report for January 1 through December 31, 2018, expected to be submitted to the NRC in May. Thus, there are no current measurements in excess of the MCL.

Nor do the Commonwealth's references to Connecticut Yankee and Maine Yankee (Pet. at 17) provide any basis for the Contention. The Commonwealth alleges (without citation or other support) that previously undiscovered strontium-90 doubled the cost of decommissioning Connecticut Yankee. *Id.* The Commonwealth also alleges that Maine Yankee encountered pockets of highly-contaminated groundwater leading to cost increases. *Id.* But these decommissioning projects preceded both the subsurface monitoring now required by the Decommissioning Planning Rule and the industry's groundwater protection initiative, conducted in large measure to ensure that subsurface conditions are understood so that they will not have an unexpected impact on decommissioning. Consequently, the Commonwealth does not show how or explain why this prior experience is applicable or material to Pilgrim. Nor does the

<sup>121</sup> See, e.g., Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-12-15, 75 N.R.C. 704, 714 (2012) ("At the threshold contention admissibility stage . . . '[b]are assertions and speculation,' even by an expert, are insufficient to trigger a full adjudicatory proceeding"); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 N.R.C. 231, 240 (2008)

Power Auth. of N.Y. (James A. Fitzpatrick Nuclear Power Plant and Indian Point, Unit 3), CLI-00-22, 52 N.R.C. 266, 315 (2000).

<sup>&</sup>lt;sup>123</sup> USEC, Inc. (Am. Centrifuge Plant), CLI-06-10, 63 N.R.C. 451, 472 (2006) (emphasis added) (quoting Private Fuel Storage, LBP-98-7, 47 N.R.C. at 181).

Commonwealth make any effort to compare the DCE against the cost of completed decommissioning projects. As previously stated, the Pilgrim decommissioning was compared to costs from similar activities from seven other decommissioned BWR nuclear power plants.<sup>124</sup> The Commonwealth does not address and provides no basis to dispute this benchmarking.

Moreover, the Commonwealth's argument that Holtec must complete a "full" site investigation and characterization prior to the proposed license transfer (Pet. at 17; Priest Decl., ¶ 4) reflects a fundamental misunderstanding of—and improper challenge to—the NRC's license termination regulations. Those regulations require that the LTP (to be submitted at least two years before the scheduled termination of the license) include among other things a site characterization, site remediation plans, detailed plans for the final radiation survey, and an updated site-specific estimate of remaining decommissioning costs. This is precisely the type of information that the Commonwealth and its experts (wrongly) claim is required now.

Likewise, the Commonwealth argument that Holtec must complete a full site characterization is inconsistent with the NRC's reasonable assurance standard, which accepts a licensee's financial assurances based on plausible assumptions and forecasts.

d. The Possibility of a Radiological Incident at the Site

The Commonwealth's reference to the possibility of a radiological incident occurring at the site, such as during the transfer of spent fuel into dry casks (Pet. at 14), does not raise a genuine dispute with the Application. As reflected in the Application, Holtec Pilgrim and HDI

<sup>&</sup>lt;sup>124</sup> See supra note 108.

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<sup>125 10</sup> C.F.R. § 50.82(a)(9)(ii). See also NUREG-1700, Rev. 2, Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans (Apr. 2018); NUREG-1757, Rev. 1, Consolidated Decommissioning Guidance, Vol, 2, Characterization, Survey, and Determination of Radiological Criteria (Sept. 2006); Regulatory Guide 1.179, Rev. 1, Standard Format and Content of License Termination Plans for Nuclear Power Reactors (June 2011).

will carry onsite property damage and offsite nuclear liability insurance meeting the coverage amounts required by the NRC. 126 The Commonwealth provides no explanation why this coverage would be insufficient. As the NRC has recognized, "[t]he risk of an offsite radiological release is significantly lower, and the types of possible accidents are significantly fewer, at a nuclear power reactor that has permanently ceased operations and removed fuel from the reactor vessel than at an operating power reactor."127

> The Possibility that DOE Might Require Repackaging of Spent e. Nuclear Fuel into New Containers

The Commonwealth's reference to the possibility that DOE might require repackaging of spent nuclear fuel into new DOE-approved transportation containers (Pet. at 14) does not raise any genuine dispute with the adequacy of the funding for spent fuel management. The Commonwealth does not dispute that Pilgrim's spent fuel is being transferred into multi-purpose canisters 128 suitable for onsite storage, transportation, and disposal. Nor does it provide any information indicating any likelihood that DOE would require the industry to repackage spent fuel. More importantly, the Commonwealth does not address or evaluate the Federal Government's liability, even if repackaging were required. 129

> f. The Possibility that DOE May Recover All or Some of Its Past Payments for the Packaging of Spent Fuel into Dry Casks

The Commonwealth speculates that if DOE removes the spent nuclear fuel without requiring repackaging, DOE might then pursue recovery of all or some of its past payments for

<sup>&</sup>lt;sup>126</sup> See LTA, Encl. 1 at 19.

<sup>&</sup>lt;sup>127</sup> Regulatory Improvements for Power Reactors Transitioning to Decommissioning, Regulatory Basis Document (Nov. 20, 2017) at 1 (ADAMS Accession No. ML17215A010).

<sup>&</sup>lt;sup>128</sup> DCE at 24-25.

<sup>&</sup>lt;sup>129</sup> Because DOE's breach necessitated moving spent fuel into dry cask storage, DOE would also be liable for any costs of removing spent fuel from dry cask storage, if repackaging were necessary. Further, if repackaging were required, DOE would be responsible under the Standard Contract for providing the new cask or canister.

the packaging of spent nuclear fuel into dry casks. Pet. at 15; Brewer Decl., ¶ 14. This claim is entirely speculative. Neither the Commonwealth nor its declarant, Mr. Brewer, provide any reason to believe that DOE is likely to assert such a claim, or likely to prevail on it. The Commonwealth and Mr. Brewer identify no tested or accepted legal theory that would allow DOE to reverse prior judgments or recoup any portion of the past damages that the Courts have awarded to the owners of Pilgrim. 130

Nor does the Commonwealth explain how the speculated recovery by DOE after "DOE removes the spent nuclear fuel without requiring packaging" would in any way impact the funding needed for decommissioning. Decommissioning of all portions of the site other than the ISFSI will be completed by 2026 under HDI's schedule, and any funds in the NDT set aside for the minimal cost of radiologically decommissioning the ISFSI should be beyond the reach of creditors, including DOE if it had any residual claim against Holtec Pilgrim. Thus, the Commonwealth's speculation fails to demonstrate any genuine dispute with the Application on a material issue of law or fact.

> The Possibility that HDI Might Not Secure Permission to Dispose g. of Class B and C Waste with the Texas Compact Commission

The Commonwealth's reference to the possibility that HDI might not secure permission to dispose of Class B and C waste with the Texas Compact Commission (Pet. at 15) is speculative and fails to demonstrate any genuine material dispute with the Application. The Commonwealth does not identify any difficulty that existing licensees, including those outside

<sup>&</sup>lt;sup>130</sup> Brewer's claims regarding DOE recovery risks are the same as those he made in a declaration supporting Vermont's hearing request in the Vermont Yankee license transfer proceeding. Compare In the Matter of Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.; Consideration of Approval of Transfer of License and Conforming Amendment (Vermont Yankee Nuclear Power Station), Docket No. 50-271-LT-2, Affidavit of Warren K. Brewer (June 12, 2017) (ADAMS Accession No. ML17164A420). Despite identifying these same risks, Mr. Brewer admitted that recovery of a significant portion of spent fuel expenses from DOE is likely. Id. at 5.

the Texas Compact, have experienced in gaining approval from the Texas Compact Commission to import waste Class B and C waste for disposal at the WCS facility in Andrews, Texas. The Commonwealth's affiant, Mr. Newhard, inaccurately states that "Holtec does not indicate that it is affiliated with or has contracted with the Texas facility or with any other particular disposal facility." Newhard Decl., ¶ 7. The DCE states that "Holtec currently holds a contract with WCS that permits disposal of radioactive waste from any decommissioning project in the United States."131 The Commonwealth also inaccurately states that if Holtec cannot secure permission to dispose of its Class B and C waste at the Texas facility, Holtec's disposal costs may increase by as much as \$170 million. Pet. at 45. The Commonwealth refers to Mr. Newhard's declaration at ¶8, but there, Mr. Newhard is comparing HDI's estimated total cost of radwaste disposal against a \$322 million estimate in NUREG-1307, Rev. 17 for disposal of all radwaste from a reference BWR for a generator not affiliated with a compact having a disposal facility. 132 Comparing these estimates for all radwaste says nothing about the added cost that might be incurred if Class B and C waste could not be disposed of in the Texas facility. (It should also be noted that the reference BWR in NUREG-1307 is considerably bigger than Pilgrim – 3400 MWt versus Pilgrim's 2028 MWt thermal rating.) Finally, while Mr. Newhard states that Holtec has provided no supporting documentation of its disposal cost estimates, the Application clearly states that "Disposal facilities were selected, and pricing was confirmed." <sup>133</sup> The Commonwealth's speculation and mischaracterization of the Application provides no basis to question an estimate of disposal costs that is based on confirmed pricing.

<sup>&</sup>lt;sup>131</sup> DCE at 27.

<sup>&</sup>lt;sup>132</sup> See NUREG-1307, Rev. 17, Report on Waste Burial Charges (Feb. 2019) at B-5 (Table B-2) (providing the \$322 million to which Mr. Newhard appears to be referring in paragraph 8 of his declaration).

<sup>&</sup>lt;sup>133</sup> LTA, Enc1, Att. D (2nd unnumbered page); DCE at 26 (emphasis added).

h. The Possibility that DOE Fails to Remove All Spent Fuel by 2062

The Commonwealth's reference to the possibility that DOE fails to remove all spent nuclear fuel by 2062 (Pet. at 18) is speculative and raises no genuine material dispute with the Application. The Commonwealth inaccurately states that "[n]owhere . . . does Holtec explain or seek to justify this conclusion." Id. This claim ignores the explanation and justification in the DCE.

HDI assumes a spent fuel management plan for the Pilgrim spent fuel that is based on the assumption that DOE will commence acceptance of PNPS's spent fuel in 2030 and, assuming a maximum rate of transfer described in the DOE Acceptance Priority Ranking & Annual Capacity Report (Reference 10), the spent fuel is projected to be fully removed [from] the Pilgrim site in 2062, consistent with the current DOE spent fuel management and acceptance strategy (References 9 and 10).<sup>134</sup>

Thus, HDI's assumptions are based on the current DOE strategy and described acceptance rate. Consistent with the DOE strategy, the projection does not depend on a final repository, but rather assumes that DOE could commence acceptance after a fuel storage facility begins operation. 135

The Commonwealth argues that HDI's assumption is incongruous with the NRC's analysis in the Continued Storage Rule (Pet. at 18), but the analysis of environmental impacts codified in the Continued Storage Rule, bounding all scenarios to address the requirements of the National Environmental Policy Act, is distinct from and irrelevant to the DCE and cash flow analysis required to determine whether Holtec Pilgrim and HDI meet the financial assurance requirements under the NRC regulations and Atomic Energy Act. 136 The Commonwealth's

<sup>&</sup>lt;sup>134</sup> DCE at 24. Reference 9 is "Strategy for the Management and Disposal of Used Nuclear Fuel and High Level Radioactive Waste," U.S. DOE, January 11, 2013. See DCE at 52. Reference 10 is "Acceptance Priority Ranking & Annual Capacity Report," DOE/RW-0567, July 2004. See id.

<sup>&</sup>lt;sup>135</sup> DCE at 43.

<sup>&</sup>lt;sup>136</sup> In CLI-16-17, the Commission stated that "with regard to the fuel-costs claim, while the Continued Storage generic environmental impact statement acknowledges for purposes of NEPA that fuel could remain on site

affiant, Mr. Brewer, also asserts that "[t]here is no certainty in the Holtec assumption that DOE will have removed all spent nuclear fuel from PNPS by 2062 . . ."<sup>137</sup> As previously discussed, the NRC does not require such absolute certainty in a licensee's financial projections but instead accepts financial assurance as providing requisite reasonable assurance when based on plausible assumptions and forecasts. <sup>138</sup>

Here, the DCE and cash flow analysis are based on the best information available from DOE regarding its strategy. The Commonwealth's attempt to cast doubt on the reasonable and plausible assumption regarding the timing of DOE acceptance – an assumption based on the best available information – does not provide a sufficient basis to challenge the reasonable assurance provided by Holtec Pilgrim's and HDI's financial projections, or demonstrate any genuine material dispute with the Application. In any event, the Commonwealth does not demonstrate that its concern is material, as any further delay in DOE acceptance would result in liability of and recovery from DOE of the added costs of spent fuel storage. 139

i. Other Claims Relating to The Possibility of Overruns and Delays

The Commonwealth makes a few additional claims regarding the likelihood of price

overrun and delays, but none of these claims demonstrates a genuine dispute with the

indefinitely, it finds the short-term period of storage most likely." *Vermont Yankee*, CLI-16-17, 84 N.R.C. at 118.

<sup>&</sup>lt;sup>137</sup> Brewer Decl., ¶ 15.

<sup>&</sup>lt;sup>138</sup> Seabrook Station, CLI-99-6, 49 N.R.C. at 221-22.

<sup>139</sup> For the same reason, the Commonwealth's observation that Entergy's ISFSI decommissioning cost estimate is greater than HDI's ISFSI decommissioning cost estimate (Pet. at 19) raises no material issue. The NRC rules will require HDI and Holtec Pilgrim to resubmit their ISFSI decommissioning funding plan every three years with adjustments as necessary to account for changes in cost and the extent of contamination. 10 C.F.R. § 72.30(c). These funding plans must include identification and justification of key assumptions, and must certify that financial assurance for the cost estimate is provided. 10 C.F.R. § 72.30(b)(3), (4), (6). Thus, any needed adjustment to the funding assurance for ISFSI decommissioning will be assessed and made at frequent intervals over the storage period. As previously discussed, DOE recoveries over that period, not credited in the cash flow analysis, provide a means for making such adjustments; and ultimately, any increase in ISFSI decommissioning costs will result in increased DOE liability.

Application. The Commonwealth states that site-specific decommissioning cost estimates for Diablo Canyon and San Onofre are roughly double what the NRC's formula amount (in 10 C.F.R. § 50.75(c)) predicted. Pet. at 19. The funding assurance in the Application is based on a site-specific estimate, not on the formula amount. Further, the Commonwealth provides no explanation why the estimates for large, multi-unit pressurized water reactors in California (owned by public utilities subjected to added California public utility commission requirements) are material to a much smaller, single unit boiling water reactor in Massachusetts. The Commonwealth similarly asserts that DOE has a track record of underestimating the costs of remediating its nuclear sites (Pet. at 20) but provides no information that would show that DOE's nuclear sites are in any way comparable to Pilgrim. Finally, the Commonwealth asserts that Holtec experienced a long delay at San Onofre, because of an incident in lowering a dry cask into a cavity enclosure container at the ISFSI pad. Pet. at 20-21. This event involved placing the canister in the underground HI-STORM UMAX storage system at San Onofre. 140 The ISFSI at Pilgrim employs the HOLTEC HI-STORM 100 storage system, 141 which is not an underground system involving the same loading issues. The Commonwealth does not identify any issues relating to the HI-STORM 100 storage system that present any material risk of delaying Pilgrim decommissioning. 142

See Revised San Onofre Nuclear Generating Station, NRC Special Inspection Report 050-00206/2018-005, 050-00361/2018-005, 050-00362/2018-005, 072-00041/2018-001 and Notice of Violation (Dec. 19, 2018) (ADAMS Accession No. ML18341A172) (cited in Pet. at 21 n.23), Encl. 3 (Special Inspection Charter).

<sup>&</sup>lt;sup>141</sup> See DCE at 25,

The Commonwealth refers to several cited and apparent violations at San Onofre (Pet. at 21), but the Commonwealth has not challenged HDI's technical qualifications in this proceeding, nor has it provided any information that HDI or Holtec Pilgrim is likely to violate requirements. "[N]o genuine dispute with regard to any issue of material fact or law" is raised where an intervenor relies on the existence of past violations, but then fails to "present[] any information indicating that any person or procedures associated with those past violations will be employed at, or involved with, the [proposed facility]." USEC, Inc. (American Centrifuge Plant), LPB-05-28, 62 N.R.C. 585, 617-19 (2005). See also GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 N.R.C. 193, 207 (2000) (absent documentary support that an applicant is likely to violate NRC

The Commonwealth also argues that HDI's and Holtec Pilgrim's structure as limited liability companies increases risk (Pet. at 23). The use of limited liability corporations in the nuclear industry (and many other industries) is hardly unusual. Indeed, it is very common, and such corporations are routinely approved by the NRC as licensed owners and operators of nuclear power plants. Even if HDI and Holtec Pilgrim were structured as traditional corporations, liability would not extend beyond the corporate boundaries to parent companies. The Commonwealth's concerns regarding a lack of access to ratepayer funding is similarly groundless. Many current licensed owners/operators of nuclear power plants – including the current Pilgrim licensees – are merchant companies that do not have access to a guaranteed rate base. This fact has not proven to be an obstacle to their ability to demonstrate compliance with the NRC financial qualifications and decommissioning funding assurance requirements.

For all these reasons, Contention 1 lacks an adequate basis, impermissibly challenges the NRC rules in a number of respects, fails to raise material issues, and is not supported by sufficient information demonstrating any genuine material dispute with the Application.

Accordingly, it should be rejected.

#### B. Commonwealth's Contention 2 Is Inadmissible

Contention 2, which argues that an environmental review of the Application is required by NRC regulations and NEPA (Pet. at 27), is inadmissible. Contention 2 is inadmissible

regulations, "this agency has declined to assume that licensees will contravene our regulations"), *citing Curators of the University of Missou*ri, CLI-95-8, 41 N.R.C. 386, 400 (1995); *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-207, 7 A.E.C. 957, 958 (1974); *Virginia Elec. & Power Co.* (North Anna Power Station, Units 3 and 4), LBP-74-56, 8 A.E.C. 126, 148 (1974).

<sup>&</sup>lt;sup>143</sup> See Oyster Creek, CLI-00-6, 51 N.R.C. at 208 ("The Commission has issued reactor licenses to limited liability organizations for decades and [petitioner] has given us no reason to depart from that practice."); Power Auth. of N.Y., CLI-00-22, 52 N.R.C. at 298 ("[Petitioner] acknowledges that we have issued reactor operating licenses to limited liability corporations in the past and that we have recently approved a transfer of such a license to an LLC whose only asset was the generating facility.").

because it fails to raise an issue material to the findings that the NRC must make, lacks factual and expert support, fails to raise a genuine dispute with the Application, and constitutes an improper challenge to the Commission's Decommissioning Rule, the categorical exclusion for license transfers, and the Continued Storage Rule.<sup>144</sup>

## 1. Contention 2 Is Barred as an Impermissible Challenge to the Categorical Exclusion Applicable to License Transfers

Contention 2 is an impermissible challenge to 10 C.F.R. § 51.22(c)(21), which excludes from environmental review "[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 Commonwealth's attack on this rule is barred by 10 C.F.R. § 2.335, absent approval of a properly-supported waiver petition, which the Commonwealth has not submitted.

The Commonwealth argues that the categorical exclusion does not apply to the Pilgrim license transfer, because: 1) the removal of the portion of license condition 3.J pertaining to the existing \$50 million fund provided by Entergy is not "required to reflect the approval of" the transfer of the license (§ 51.22(c)(21)); and 2) the elimination of a \$50 million contingency allowance means that "special circumstances" apply precluding reliance on the categorical exclusion. Pet. at 32-34. Both these arguments ignore the purpose of the \$50 million contingency fund and the fact that it will be naturally obsoleted by the license transfer. Given that the removal of the \$50 million contingency fund is clearly a part of the license transfer – and would necessarily be a part of any license transfer where the former owner had access to supplemental funding provided by an affiliate – the Commonwealth's contention is an

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<sup>&</sup>lt;sup>144</sup> 10 C.F.R. § 2.309(f)(1)(iii-vi).

impermissible collateral attack on the Commission's rule categorically excluding license transfers from environmental review.<sup>145</sup>

Removal of the portion of license condition 3.J, which currently requires Entergy to provide a "\$50 million contingency fund" is clearly an amendment associated with the license transfer and required to reflect approval of that transfer. The \$50 million contingency fund that forms the basis of the Commonwealth's claim was one of the conditions placed on Entergy Nuclear when it acquired Pilgrim from Boston Edison in 1999, at a time when the NDT was at least \$396 million. 146 Removal of this license condition is associated with and required to reflect approval of the current license transfer because, as previously discussed, the amendment conforms the license to reflect the proposed transfer, where Holtec Pilgrim and HDI are basing their financial qualifications on the adequacy of the NDT and are not relying on any parent support agreement or other forms of supplemental financial assurance to support their financial qualifications. In short, the amendment deletes a condition that relates to a support agreement provided by Entergy<sup>147</sup> (which is now extinguishing its interests in and responsibility for Pilgrim), and that is not part of the financial assurances that Holtec Pilgrim and HDI propose. The NRC Staff may choose to place *new* conditions on the license arising from the Holtec acquisition after performing its review, but that would still require removal of the Entergy license conditions at issue.

Moreover, the Commonwealth has provided no support for the claim that removing this condition would have any environmental impact whatsoever, let alone that it would constitute

<sup>145</sup> As discussed *supra* in Section V.A.1, challenges to the Commission rules and regulations are not subject to attack without the Commonwealth filing a petition for waiver.

<sup>&</sup>lt;sup>146</sup> LTA, Encl. 1, Att. A, at 4.

<sup>&</sup>lt;sup>147</sup> See supra note 62.

"extraordinary circumstances in which a normally excluded action may have a significant environmental effect." At the time of the deal closing, the NDT will contain at least \$1.03 billion, \$149\$ significantly more than the \$396 million in the trust fund when the license condition requiring a \$50 million contingency fund was put into place. The Commonwealth has put forth no reason to expect the removal of the license condition pertaining to Entergy's \$50 million support agreement to have any environmental impact when the trust has increased by such a substantial amount.

Moreover, by the clear terms of the existing license condition, Entergy could fully expend the \$50 million contingency fund for operating and maintenance costs during plant operations, the costs to transition the plant to decommissioning prior to shutdown, or post-shutdown work including spent fuel management prior to the closing of the transaction. Thus, this license condition has no bearing on the amount of funds that would be available to HDI and Holtec Pilgrim.

The Commonwealth also argues that the elimination of the license condition is a "special circumstance," under 10 C.F.R. § 51.22(b), precluding the NRC from relying on a categorical exclusion. While the term "special circumstances" has not been defined by the Commission, the Commonwealth argues that it is meant to comply with CEQ regulations specifying that agencies must "provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect." *See* Pet. at 33 (citing 40 C.F.R. § 1508.4). Yet, even using that test, the Commonwealth fails to provide any support for how deleting the

<sup>&</sup>lt;sup>148</sup> 40 C.F.R. § 1508.4.

<sup>&</sup>lt;sup>149</sup> LTA, Encl. 1 at 17.

LTA, Encl. 1, Att. A at 4 ("Once the plant has been placed in a safe-shutdown condition following a decision to decommission, Entergy Nuclear will use any remainder of the \$50m contingency fund. . . .").

Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9,352, 9,366 (Mar. 12, 1984).

contingency fund (which could be expended prior to the transaction anyway) would cause a significant environmental effect and thus a special circumstance. Nor does the Commonwealth provide any support for the argument that sole reliance on the NDT would cause a significant environmental effect. In fact, given that the Commission must determine that the financial assurances are adequate before approving the license, and the Commonwealth has raised no material dispute with those assurances (as discussed in the response to Contention 1, *supra*), no special circumstances or significant environmental effects are apparent.

Finally, it is of note that in promulgating the categorical exclusion rules, the Commission not only declined to define the term "special circumstances," but it also declined to provide the opportunity for affected parties to present their views before deciding to invoke the special circumstance exception. <sup>152</sup> As the Commission explained,

Although there may be occasions when the Commission will wish to seek comment from affected persons or the public at large before making a finding of special circumstances, the Commission believes that its responsibilities for protecting the public health and safety and giving appropriate consideration to environmental values will be best served if it retains the flexibility and authority to direct its staff to prepare environmental assessments or environmental impact statements very early in the decisionmaking process.<sup>153</sup>

Entertaining contentions on the application of special circumstances would also arguably undercut the Commission's discretion to direct the Staff on the use of categorical exclusions, particularly in an instance such as this, where the Petitioner has no factual or expert support, has not alleged an issue material to the findings that the NRC must make, and appears to be arguing for the application of NEPA in the absence of any alleged environmental impact.

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<sup>&</sup>lt;sup>152</sup> *Id.* at 9.365-66.

<sup>&</sup>lt;sup>153</sup> *Id.* at 9,366.

In summary, the Commonwealth has failed to show that the categorical exclusion under 10 C.F.R. § 51.22(c)(21) is inapplicable in this instance, and has failed to submit any waiver petition demonstrating "special circumstances" warranting an environmental analysis or to even allege an environmental impact arising from the change. Because the Commonwealth has not submitted any properly supported petition seeking waiver of the categorical exclusion, its argument amounts to an impermissible challenge to the NRC's categorical exclusion rule and should be denied.

2. The Commonwealth's Concern that the Application and Exemption May Result in a Shortfall in Funding Lacks Basis and Fails to Demonstrate Any Genuine Material Dispute with the Application

Even if it were not barred by the categorical exclusion, Contention 2 is inadmissible because it is not supported by information demonstrating that the Application would result in any significant environmental impact. The gravamen of the Commonwealth's argument appears to be that an EIS must be prepared on the proposed license transfer, because it allegedly gives rise to the possibility of a decommissioning funding shortfall and associated environmental and economic effects. *See* Pet. at 34-36. The Commonwealth claims that the amount of decommissioning funds would be nearly drained by 2063, leaving Holtec with no committed source of funds to cover spent fuel management and resulting in an increased risk of radiological accidents. Pet. at 35.<sup>154</sup> As previously discussed, the Commonwealth ignores the NRC's oversight of the use of the NDT (which includes annual reporting and funding adjustment requirements), as well the provisions in the NRC's rules that prohibit withdrawals that would

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In support of its argument that the absence of committed funds for the "very possible outcome" of indefinite storage will increase the probability and consequences of radiological accident, the Commonwealth relies solely on the legal authority of a vacated board decision. See Pet. at 35 (citing Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-15-24, 82 N.R.C. 68 (2015), vacated Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-16-8, 83 N.R.C. 463 (2016)).

inhibit the ability of the licensee to complete the funding of any shortfalls or inhibit the completion of decommissioning. As previously noted, the NRC does not presume that a licensee will violate its regulations." The Commonwealth also ignores the information in the Application demonstrating Holtec Pilgrim's ability to adjust funding.

Further, the Commonwealth's argument rests on the incorrect premise that any possibility of an environmental effect requires an environmental impact statement. The Commonwealth cites 42 U.S.C. § 4332(2)(C) and *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1211 (9th Cir. 1998) for the proposition that "the mere *possibility* of significant environmental impacts precludes a FONSI and triggers the need for an EIS." Pet. at 29 (emphasis in original). Neither of these citations supports this proposition. As the Commission has held, NEPA is governed by a rule of reason and does not extend to all conceivable consequences of agency decisions. <sup>157</sup> Instead, NEPA requires only a discussion of "reasonably foreseeable" impacts and not "remote and speculative" scenarios. <sup>158</sup>

As discussed in detail above in Section V.A.3, the Commonwealth does not establish how the NDT would become underfunded, given the substantial protections in place in the NRC's

<sup>&</sup>lt;sup>155</sup> See 10 C.F.R. § 50.82(a)(8)(i)(C).

<sup>&</sup>lt;sup>156</sup> See supra note 103.

Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-02-25, 56 N.R.C. 340, 347 (2003). As the Commission observed, CEQ regulations require an EIS to direct effects, which are those which are caused by the action and occur at the same time and place, and indirect effects, which are caused by the action and are later in time or farther removed in distance, but still reasonably foreseeable. Private Fuel Storage, CLI-02-25, 56 N.R.C. at 348, citing 10 C.F.R. § 1508.8.

<sup>158</sup> Id. at 348. The Commonwealth also cites San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n, 449 F.3d 1016, 1030 (9th Cir. 2006) for the proposition that "Courts will reverse a decision not to prepare an EIS when the agency has failed to consider all substantially possible effects of the action." Aside from being a decision the NRC has declined to follow outside the 9th Circuit – see Ameren Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 N.R.C. 124, 128-29 (2007) – San Luis Obispo does not establish such a standard. Indeed, San Luis Obispo recognizes that an agency is not required to consider consequences that are speculative. 49 F.3d at 1033 ("[I]t is true that the agency is not required to consider consequences that are 'speculative.").

decommissioning funding rules and Holtec Pilgrim's ability to adjust decommissioning funding as needed. As detailed in the Application "financial assurance status reports must be submitted to the NRC annually" throughout decommissioning. <sup>159</sup> The Application explains,

The report must include, among other things, amounts spent on decommissioning, the remaining trust fund balance, and estimated costs to complete radiological decommissioning. If the remaining NDT balance, plus earnings on such funds calculated at not greater than a 2 percent real rate of return, plus any other financial assurance methods being relied upon, does not cover the estimated costs to complete radiological decommissioning, 10 CFR 50.82(a)(8)(vi) requires that additional financial assurance to cover the estimated costs to complete radiological decommissioning must be provided. These annual reports provide a means for the NRC to monitor the adequacy of the funding available for the radiological decommissioning of PNPS notwithstanding the exemption allowing HDI to use funds for spent fuel management and site restoration activities from the trust fund. 160

Yet, the Commonwealth does nothing to address this assessment, and provides no support for its claim that the NDT will be inadequate. As described in Section V.A.3, the Application establishes that there is significant conservatism in the financial (cash flow) analyses demonstrating the ability of Holtec Pilgrim and HDI to fund decommissioning, spent fuel management and site restoration costs. Instead of addressing that analysis, the Commonwealth merely speculates that the exemption will increase the probability or consequences of radiological accidents because there will only be \$3.615 million in the NDT in 2063, leaving no source of funds for spent fuel management after that year. Pet. at 35. However, the

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<sup>&</sup>lt;sup>159</sup> LTA, Encl. 2 at E-7.

 $<sup>^{160}</sup>$  *Id.* at E-7 – E-8.

The year 2063 is when the license is expected to be terminated and the fund is projected to be released from Commission jurisdiction for Holtec Pilgrim's and HDI's use. LTA, Encl. 1, Att. D (1st unnumbered page); *id.*, Encl. 2 at E-6. If this occurs, as currently expected based on the best information currently available on DOE's strategy for accepting spent nuclear fuel, the value of the fund at that time is irrelevant—HDI and Holtec Pilgrim can use the remaining money for any purpose after the license has been terminated.

fuel management costs, with the availability of substantial additional cash flow from DOE recoveries. The Commonwealth does not address the use of this \$500 million, nor does it address the conservatisms in the Application analysis. Further, if spent fuel management were required after 2063, the Commonwealth provides no reason to believe that DOE would not be liable for the added storage costs. The Commonwealth thus fails to provide support for its claim that there will be an increase in the probability or consequences of radiological accidents.

As noted above, Commission regulations clearly plan for Commission oversight of the fund throughout decommissioning, with a mechanism for the Commission to demand more funding or assurance if needed. By claiming that Holtec Pilgrim and HDI need to provide funding for indefinite spent fuel storage and non-radiological clean up (Pet. at 35), the Commonwealth is challenging the Commission regulations that take a year-by-year, real time approach to ensuring the adequacy of decommissioning funds. Further, the Commission has opined that it is not unreasonable for the NRC Staff to assume a short-term (and not indefinite) period of spent fuel storage when analyzing the cost of onsite storage, with annual reports used to plan for any shortfalls. <sup>163</sup>

Moreover, there is no basis for the Commonwealth's allegation that the exemption would permit Holtec to divert approximately \$500 million from the NDT leaving it little or no money to address non-radiological contamination. Pet. at 36. The Commonwealth does not explain how any funds could be improperly diverted from the NDT. Nor is there any basis for a concern that DOE recoveries might not be available, leading to a shortfall in funds for site restoration. Under HDI's schedule for decommissioning, decommissioning and restoration of the site (other than

<sup>&</sup>lt;sup>162</sup> See supra at Section V.A.3.

<sup>&</sup>lt;sup>163</sup> Vermont Yankee, CLI-16-17, 84 N.R.C. at 118.

the ISFSI) will be completed in 2026, at which time over \$200 million is projected to still remain in the fund<sup>164</sup> without any credit for DOE recoveries, and the additional cash flow from DOE recoveries (that could be used to adjust funding if necessary) will continue for many years thereafter.

Consequently, the possibility of a shortfall in decommissioning funding preventing completion of decommissioning or spent fuel management is not a reasonably foreseeable consequence of the license transfer. On the contrary, it is a highly remote and speculative claim that presupposes that (1) the determination of adequate funding that the NRC must make in order to approve the Application and exemption is incorrect, (2) the continuing funding assurance required by the comprehensive NRC's rules and oversight is inadequate, (3) none of the hundreds of millions recoverable from DOE would be available to provide additional funding assurance if needed, and (4) HDI and Holtec Pilgrim would violate their licenses and the NRC rules by failing to provide funding assurance and complete licensed activities.

Further, to the extent that the Commonwealth is asserting that the exemption request could somehow lead to unanalyzed impacts of spent fuel storage, including radiological accidents, it is impermissibly challenging the Continued Storage Rule, which codifies the environmental impacts of spent fuel storage analyzed in NUREG-2157, "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel."

# 3. The Commonwealth's Claims Regarding the PSDAR Are Outside the Scope of this Proceeding and Impermissibly Challenge NRC Rules

The Commonwealth also makes a number of arguments that the PSDAR necessitates an environmental review as part of this license transfer proceeding, but none of these arguments has

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LTA, Encl. 1, Att. D (5<sup>th</sup> and 6<sup>th</sup> unnumbered pages) (Pilgrim Nuclear Power Station Decommissioning Cash Flow Analysis).

any merit. For example, the Commonwealth describes the Application and PSDAR as a combined proposal and states that NRC approval thus constitutes a major federal action. Pet. at 37. The Commonwealth also argues that the Commission must prepare an EIS approving the Application, Exemption Request, Revised PSDAR and cost estimate. *Id.* at 27.<sup>165</sup>

In addition, the Commonwealth argues that the Revised PSDAR is not bounded by the previous EISs because there is "new and significant information that requires preparation of a site-specific supplemental EIS," (*id.* at 38), such as "information regarding the reasonably foreseeable potential that the increasingly adverse effects of climate change will impact site decommissioning, site restoration, and spent fuel management activities" (*id.*). The Commonwealth claims that an increase in storms and coastal flooding, and other climate change effects are not considered "in the specific context of decommissioning and site restoration." *See* Pet. at 38-40. The Commonwealth also argues that the Revised PSDAR must include an environmental analysis on the possibility of a cask drop accident, spent fuel pool accidents, and the possibility of a shortfall in the fund. *Id.* at 40-42.

As previously discussed, the Commonwealth argument that the PSDAR is being approved lacks any basis and represents a challenge to the NRC rules. 10 C.F.R. § 50.82(a)(4), which requires the submission of a PSDAR, does not require any approval of that document. <sup>166</sup> Further, as the Commission has stated, the PSDAR does not amend the license, and as such the

As previously discussed, in Contention 1, the Commonwealth asserted that "approving the LTA request effectively approves the Revised PSDAR and its financial and environmental analysis." Pet. at 8.

<sup>166</sup> See also 1996 Decommissioning Rule, 61 Fed. Reg. at 39,281 ("The purpose of the PSDAR is to provide a general overview for the public and the NRC of the licensee's proposed decommissioning activities until 2 years before termination of the license. The PSDAR is part of the mechanism for informing and being responsive to the public prior to significant decommissioning activities taking place. It also serves to inform and alert the NRC staff to the schedule of license activities for inspection and planning purposes and for decisions regarding NRC oversight activities. . . . [T]he final rule eliminates the need for an approved decommissioning plan . . ."); Vermont Yankee, CLI-16-17, 84 N.R.C. at 126 ("the Staff does not formally approve a licensee's PSDAR").

licensee is not required to submit a corresponding environmental report.<sup>167</sup> After a plant permanently ceases operation, the NRC rules allow a licensee to perform major decommissioning activities ninety days after the PSDAR is submitted without any further approval.<sup>168</sup> Thus, the activities that HDI and Holtec Pilgrim plan to take, as described in the Revised PSDAR, are activities that the NRC rules allow. HDI and Holtec Pilgrim must demonstrate in the Application that they are financially qualified to perform these activities, but they neither need nor are requesting any approval of the activities.

In the same vein, the PSDAR does not represent a federal action. As the Commonwealth notes in its Petition, there is federal action "where regulatory approval is necessary to a licensee's actions." *See* Pet. at 37 n.54 (citing 40 C.F.R. § 1508.18). The approval of a license transfer application does not require NRC approval over any decommissioning activities.

Moreover, if the Commonwealth's argument were accepted, all license transfers would require a full NEPA analysis as the financial qualifications of transferees always relate to subsequent, projected licensed activities (such as plant operations).

Additionally, the caselaw cited by the Commonwealth for the proposition that decommissioning activities require a NEPA analysis is no longer applicable. The Commission previously determined that *Citizens Awareness Network, Inc. v. Nuclear Regulatory Comm'n*, 59 F.3d 284, 293 (1st Cir. 1995), has been rendered obsolete by the more recent 1996 Decommissioning Rule. Since the 1996 Rule prohibits any major decommissioning with impacts outside existing environmental analysis, the NRC has rejected the idea that review of the

<sup>&</sup>lt;sup>167</sup> Vermont Yankee, CLI-16-17, 84 N.R.C. at 124.

<sup>&</sup>lt;sup>168</sup> See 10 C.F.R. § 50.82(a)(5).

PSDAR "should be defined as a major federal action under NEPA." The Commission has also rejected the argument that, under *Ramsey v. Kantor* cited by the Commonwealth (Pet. at 37), the NRC Staff's review of a PSDAR renders it a major federal action. 170

Moreover, as the Commission has explained:

In promulgating the Final Decommissioning Rule, the NRC specifically considered and rejected the idea that review of the PSDAR should be defined as a major federal action under NEPA because environmental analysis of activities to be performed under the PSDAR will necessarily have been performed in accordance with prior site-specific or generic analysis. Unless the environmental impacts of *particular decommissioning activities* will fall outside the previously performed analysis, the rule does not contemplate additional NEPA analysis at the PSDAR stage.<sup>171</sup>

Yet, contrary to this clear precedent, the Commonwealth alleges that the Commission's rule amounts to "skirt[ing] NEPA or other statutory commands," (Pet. at 36) in a clear challenge to the rule.

Even if the environmental impacts of the decommissioning activities described in the Revised PSDAR were within the scope of this proceeding (which they are not), the Commonwealth does not allege specific environmental impacts from "any particular decommissioning activities" 172 at Pilgrim. By the plain terms of the contention, alleging that "the increasingly adverse effects of climate change will impact site decommissioning," the Commonwealth's climate-change allegations appear to be focused on how the environment might impact the site. Pet. at 38. 173 The Commonwealth then fails to demonstrate or support

<sup>&</sup>lt;sup>169</sup> See Vermont Yankee, CLI-16-17, 84 N.R.C. at 125-26.

<sup>&</sup>lt;sup>170</sup> *Id.* at 126-27.

<sup>&</sup>lt;sup>171</sup> *Id.* at 126.

<sup>&</sup>lt;sup>172</sup> Vermont Yankee, CLI-16-17, 84 N.R.C. at 126.

<sup>173</sup> The Revised PSDAR fails to address "information regarding the reasonably foreseeable potential that the increasingly adverse effects of climate change will impact site decommissioning, site restoration, and spent fuel management activities."

how climate change would increase the environmental impact of any particular decommissioning activities. *See* Pet. at 38-40.<sup>174</sup> The Commonwealth provides no information showing that sealevel rise or other weather effects would have any impact on decommissioning during the next 6 years when all of the site other than the ISFSI will be decommissioned. If anything, HDI's decommissioning activities ("DECON") will reduce any risks associated with climate-change and flooding because HDI will accelerate the decommissioning.<sup>175</sup>

Nor does the Commonwealth identify any specific analysis or finding in the GEIS on decommissioning<sup>176</sup> that would be affected by new information or explain why any such effect would significantly and materially alter the conclusions. The Commonwealth merely argues that the Commission's generic environmental impact statements should be tossed aside as they predate the "extreme, record-breaking weather-related effects of climate change." Pet. at 40. The Commonwealth could make the same argument for any site or decommissioning project.

<sup>174</sup> The Commonwealth makes a couple of unsupported, speculative assertions that climate change will have significance to "the potential for spent fuel pool fires or dry cask rupture" and the possibility of "storm surges and their height could exacerbate existing non-radiological contamination on-site." Petition at 39-40. Neither of these claims addresses specific decommissioning activities at the Pilgrim. Indeed, as discussed later, spent fuel management is not even within the NRC's definition of decommissioning. The claims also lack factual or expert support and constitute, at best, the type of research project and crystal ball inquiry that is not required by NEPA. Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-22, 72 N.R.C. 202, 208 (2010) ("An [EIS] is not intended to be 'a research document." (citation omitted)); Natural Res. Def. Council v. Morton, 458 F.2d 827, 837 (D.C. Cir. 1972) ("[NEPA] does not require [a] crystal ball inquiry." (internal quotations omitted)).

<sup>175</sup> The Revised PSDAR proposes the use of the DECON method (wherein "the equipment, structures, and portions of the facility and site that contain radioactive contaminants are promptly removed or decontaminated to a level that permits termination of the license shortly after cessation of operations") while Entergy's PSDAR was based on the SAFSTOR method (wherein "after the plant is shut down and defueled, the facility is placed in a safe, stable condition and maintained in that state (safe storage)"). See Revised PSDAR at 2, 4-5.

NUREG-0586, Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Supplement 1, Regarding the Decommissioning of Nuclear Power Reactors (Nov. 2002) ("NUREG-0586 Supp. 1").

The Commonwealth's claim that climate change could have any impact on spent fuel storage is not even within the NRC's definition of decommissioning. Therefore, accidents from spent fuel storage are not "environmental impacts associated with site-specific decommissioning activities" that must be discussed in the PSDAR pursuant to 10 C.F.R. § 50.82(a)(4)(i), or impacts within the scope of the GEIS on decommissioning. Moreover, the Commonwealth does not provide any information demonstrating that climate change might affect the ISFSI, as the ISFSI is being relocated to a higher location, and the Commonwealth provides absolutely no information that its projected elevation might be impacted.

Moreover, the Commonwealth's claim that the PSDAR must consider new and significant information relating to spent fuel storage (Pet. at 38), including the significance of climate change to the potential for spent fuel pool fires and dry cask rupture (*id.* at 40), and potential impacts of the consequences of a mishap during the transfer of spent nuclear fuel transfer (*id.* at 40-41), is an impermissible challenge to the Continued Storage Rule. Is In the 2014 Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157) codified by the, Continued Storage Rule, the NRC has analyzed, in detail, the environmental impacts of spent fuel storage following permanent cessation of operations, including impacts under short-term, long-term, and indefinite storage scenario, and including the

<sup>&</sup>lt;sup>177</sup> See, e.g., Reg. Guide 1.202 at 2 ("The NRC's definition of decommissioning does not include other activities related to facility deactivation and site closure, including operation of the spent fuel storage pool, construction and/or operation of an independent spent fuel storage installation. . . ."); see also 10 C.F.R. § 50.75 n.1.

<sup>&</sup>lt;sup>178</sup> See NUREG-0586, Supp. 1 at 1-6, excluding spent fuel management activities from the scope of its environmental review

DCE at 25; Transcript of Public Meeting on Pilgrim Post-Shutdown Decommissioning Activities Report (Jan. 15, 2018) at 19, 54 (ADAMS Accession No. ML19031C835).

<sup>180 10</sup> C.F.R. § 51.23 ("The Commission has generically determined that the environmental impacts of continued storage of spent nuclear fuel beyond the licensed life for operation of a reactor are those impacts identified in NUREG-2157, "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel.").

impacts of accidents.<sup>181</sup> That analysis specifically considers climate change.<sup>182</sup> The Commonwealth does not address or challenge the analysis in NUREG-2157, or include any petition for waiver of the Continue Storage Rule. Thus, all claims regarding the environmental impacts of spent fuel storage are barred by 10 C.F.R. § 2.335 and must be rejected.

#### VI. CONCLUSION

For the foregoing reasons, the Commission should determine that Commonwealth has failed to put forward an admissible contention and should therefore deny the Commonwealth's Petition.

Respectfully submitted,

/signed electronically by David R. Lewis /

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March 18, 2019

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NUGEG-2157, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (Sept. 2014), §§ 4.18-4.19. and App. F.

<sup>&</sup>lt;sup>182</sup> See id. at 4-89 to 4-90.

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### Before the Commission

In the Matter of	)		
	)		
Entergy Nuclear Operations, Inc,	)		
Entergy Nuclear Generation Company,	)	Docket Nos.	50-293-LT
Holtec International, and	)		72-1044-LT
Holtec Decommissioning International, LLC	)		
	)		
(Pilgrim Nuclear Power Station)	)		

### **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing Applicants' Answer Opposing the Commonwealth of The Commonwealth' Petition for Leave to Intervene and Hearing Request has been served through the E-Filing system on the participants in the above-captioned proceeding this 18<sup>th</sup> day of March, 2019.

/signed electronically by David R. Lewis/ David R. Lewis