UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
ENTERGY NUCLEAR OPERATIONS, INC.,	)	
ENTERGY NUCLEAR GENERATION	)	
COMPANY, AND HOLTEC	)	Docket Nos. 50-293 & 72-1044
DECOMMISSIONING INTERNATIONAL,	)	
LLC; CONSIDERATION OF APPROVAL OF	)	
TRANSFER OF LICENSE AND	)	
CONFORMING AMENDMENT	)	
	)	
(Pilgrim Nuclear Power Station)	)	

COMMONWEALTH OF MASSACHUSETTS' REPLY IN SUPPORT OF PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST

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INTRODUCTION

The Applicants, Entergy Nuclear Operations, Inc. (Entergy) and Holtec International (Holtec) (collectively, the Applicants),[1] oppose the Commonwealth of Massachusetts' Petition to Intervene and for a Hearing on the Proposed Action[2] based on a simple yet wholly misguided premise: trust us. Trust that the Pilgrim Decommissioning Trust Fund (Trust Fund) contains a sufficient amount of money for Holtec, on its first attempt, to decommission and restore the site (including remediation of non-radiological contamination) at a pace never previously achieved. Trust that the amount remaining in the Trust Fund after license termination will be enough to manage spent nuclear fuel safely onsite for decades. And trust that the Nuclear Regulatory Commission's (NRC or Commission) oversight will prevent a funding shortfall as an otherwise asset-less Holtec embarks on this unprecedented effort. But the NRC's financial assurance requirements are not built on trust; they are built on the need for a detailed showing that Holtec has accounted for all plausible contingencies in its DCE and that it has sufficient funds to pay for all activities described in its PSDAR as well as the plausible contingencies of those activities. As explained in the Commonwealth's Petition and elaborated on further below, the Commonwealth has satisfied its minimal burden to demonstrate the existence of a genuine material dispute and the right to a hearing on both of the Commonwealth's Contentions.

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[1] In this Reply, Entergy refers to Entergy Nuclear Operations, Inc. and Entergy Nuclear Generation Company (ENGC) (to be known as Holtec Pilgrim, LLC), and Holtec refers to Holtec International and Holtec Decommissioning International, LLC (HDI).

[2] The Proposed Action includes the License Transfer Application (Application or LTA), Holtec's unconditioned request for an exemption to use Pilgrim's Decommissioning Trust Fund for site restoration and spent fuel management costs (Exemption Request), and Holtec's Revised Post-Shutdown Decommissioning Activities Report (PSDAR) and Site-Specific Decommissioning Cost Estimate (DCE or Cost Estimate). *See infra* pp.35-36.

The Commonwealth's Petition sets forth two contentions. First, the Applicants have failed to demonstrate that their DCE properly accounts for plausible contingencies that may arise during decommissioning, site restoration, and management of spent fuel onsite. Second, the National Environmental Policy Act (NEPA) requires the Commission to fully consider and disclose to the public the potential direct and indirect environmental consequences of the Applicants' Proposed Action. Each contention is accompanied by lengthy and detailed bases and supporting evidence, including five declarations from expert witnesses. Each contention, as explained in the Commonwealth's Petition and elaborated on below, satisfies 10 C.F.R. § 2.309(f)(1)'s contention admissibility requirements.

In their response, Applicants challenge the Commonwealth's contentions on the following grounds. With respect to the first contention, the Applicants assert that Holtec's cost estimate is accurate and that Pilgrim's Trust Fund provides ample financial assurance for funding decommissioning, site restoration, and spent fuel management, because (1) the NRC can require Holtec to provide additional financial assurance in the event of a potential shortfall, and (2) Holtec could recover $500 million in spent fuel costs from the U.S. Department of Energy (DOE). With respect to the Commonwealth's NEPA-related contention, the Applicants flatly deny that any potential environmental consequences will flow from a Commission decision accepting Holtec's PSDAR and DCE and granting the LTA and Exemption Request.

The Applicants fail, however, to address two uncontested facts that are fatal to their attempt to defeat the Commonwealth's Petition. First, should future costs arise that exceed available funds, the Commission would be unable to secure additional funding from Holtec for the simple reason that Holtec Pilgrim's and HDI's only currently committed source of funds (and indeed only source of funds, as neither of those entities have any assets) are the funds in the

Trust Fund. Second, Holtec has carefully avoided making a regulatory commitment to use the $500 million it hopes to recover from DOE to cover any funding shortfall. Not only do these two uncontested facts undercut the Applicants' arguments against the Commonwealth's first contention, but they also give rise to a reasonably foreseeable possibility of a funding shortfall and associated potential environmental effects, supporting the Commonwealth's second contention regarding the need for the NRC to perform at least an environmental assessment under NEPA in addition to the fact that the categorical exclusion the Applicants claim exempts the Proposed Action from NEPA simply does not apply. For these reasons, in addition to the reasons set forth in the Commonwealth's Petition and its supporting expert declarations, the Commission should grant the Commonwealth's Petition.

CONTENTION ADMISSIBILITY STANDARDS

To have its contentions admitted for a hearing, the Commonwealth must satisfy the contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1). While these standards may very well be "enforced rigorously," as the Applicants state, Answer 12, the Commission's decisions make clear that the Commonwealth's contentions must be "viewed in a light favorable to" the Commonwealth and require only "a minimum showing." *Gulf States Utils. Co.*, *et al.* (River Bend Station, Unit 1), 40 N.R.C. 43, 51-52 (Aug. 23, 1994); *see also Arizona Pub. Serv. Co.* (Palo Verde Nuclear Station, Unit Nos. 1, 2 & 3), 34 N.R.C. 149, 155 (Aug. 16, 1991). The Commonwealth need not "prove its case" at this stage. *Gulf States Utils. Co.*, 40 N.R.C. at 51. Instead, to show a genuine dispute exists, the factual support necessary "need not be in formal evidentiary form, nor be as strong as that necessary to withstand a summary disposition motion." *Id.* All that "is required is a minimal showing that material facts are in dispute, thereby

demonstrating that an inquiry in depth is appropriate." *Id.* (internal quotations omitted). Both of the Commonwealth's Contentions satisfy these threshold admissibility standards.

ARGUMENT

I. Contention I Satisfies 10 C.F.R. § 2.309(f)(1)'s Admissibility Requirements.

The Applicants fail to provide sufficient detail demonstrating that their financial assurance, which includes their projected cash flow analysis, adequately considers realistic contingencies that Holtec is likely to face in the decommissioning, site restoration, and spent fuel management work it must undertake at Pilgrim if the requested relief is granted. The Commonwealth identifies numerous scenarios that may lead to significant cost overruns, many of which have actually occurred during nuclear decommissioning at other sites in New England and across the Nation. It is impossible to tell from the conclusory statements in the Applicants' application regarding the assumptions underpinning their cash flow analysis whether they have accounted for these realistic possibilities. The Commonwealth does not need to prove that each one of the examples proffered in its Petition will occur. Rather, it need only show that the identified contingencies are plausible and that Holtec's cash flow analysis does not provide adequate details demonstrating the Applicants' ability to cover potential contingencies. Thus, and as further outlined below, the Commonwealth raises an admissible, material dispute pursuant to 10 C.F.R. § 2.309(f)(1) with respect to the Applicants' cash flow analysis.

The Commonwealth's first Contention also raises an admissible challenge to the "no significant hazards consideration" finding because the Applicants' proposed removal of the $50 million contingency condition that the NRC required to be in Pilgrim's license is a substantive amendment. As a result of the license transfer, Entergy is "extinguishing its interest in and responsibility for Pilgrim." Answer 17. Yet, the $50 million condition is expressly imposed on

ENGC (to be renamed Holtec Pilgrim), *which will survive the transfer*. Applicants' unilateral proposal to eliminate that NRC-imposed license obligation on ENGC/Holtec Pilgrim constitutes a significant substantive change for the operating licensee. The Commonwealth is thus not challenging the NRC's regulations in 10 C.F.R. § 2.1315, but rather the application of those regulations to the facts of this case.

A. The Commonwealth Has Provided Adequate Factual Support and Expert Opinion to Raise a Genuine Dispute in Contention I.

Contention I meets all aspects of 10 C.F.R. § 2.309(f)(1). The Applicants specifically challenge Contention I on the grounds that it does not: (1) provide an adequate basis, § 2.309(f)(1)(ii); (2) demonstrate material issues, § 2.309(f)(1)(iv); and (3) provide sufficient information to show a genuine material dispute, § 2.309(f)(1)(vii). Answer 19. The Applicants are wrong.

Section 2.309(f)(1)(ii) requires the Commonwealth to "[p]rovide a brief explanation of the basis for [its] contention." 10 C.F.R. § 2.309(f)(1)(ii). The basis for Contention I is straightforward: the LTA fails to contain sufficient information to demonstrate that Holtec's financial assurance, which includes its projected cash flow analysis, is acceptable as required under by Section 182(a) of the Atomic Energy Act (AEA) and the NRC regulations that implement that AEA. 42 U.S.C. § 2232. "[F]unding plans that rely on assumptions seriously at odds with governing realities will not be deemed acceptable simply because their form matches plans described in the regulations."[3] It is the Applicants' burden to show with sufficient information that Holtec is financially qualified to hold the NRC license it seeks, which here includes sufficient funds "to cover the estimated costs for the radiological decommissioning of

[3] *N. Atl. Energy Serv. Corp., et al* (Seabrook Station, Unit 1), 49 N.R.C. 201, 222 (Mar. 5, 1999).

the facility (including the ISFSI), [site restoration,] and spent fuel management[.]"[4] The fundamental basis for Contention I is that Holtec has not made this demonstration with a satisfactory level of detail to show that the Proposed Action, if allowed, will comply with 10 C.F.R. § 50.82(a)(8)(i)(B) or (C).

Section 2.309(f)(1)(iv) requires the Commonwealth to "[d]emonstrate 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." 10 C.F.R. § 2.309(f)(1)(iv). The issue of financial assurance is undoubtedly material to the findings the NRC must make in this action. The NRC Staff's review of the license transfer application for Vermont Yankee makes that clear. There, as here, NRC Staff stated that they must analyze "the projected costs for decommissioning the facility and terminating the license, and managing irradiated fuel until the [DOE] takes title and possession of the fuel," and determine whether the transferee has sufficient funds to cover those costs.[5] Indeed, NRC Staff included an independent cash flow analysis after assessing Vermont Yankee's decommissioning trust fund and the proposed costs to terminate the NRC license and manage the spent fuel.[6] Here, just as in the Vermont Yankee proceeding, Holtec must show that it is financially qualified to hold the NRC license so that the NRC may find that Holtec complies with the NRC's financial requirements, including 10 C.F.R. §§ 50.33(f), (k)(1), 50.54(bb), 50.75, and

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[4] *Safety Evaluation by the Office of Nuclear Reactor Regulation and Office of Nuclear Material Safety and Safeguards Related to Request for Direct and Indirect Transfers of Control of Renewed Facility Operating License No. DPR-28 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, Dkt. Nos. 50-271 & 72-59, at 17 (Oct. 11, 2018) (ADAMS Accession No. ML18242A639) (hereinafter, *NRC Staff Safety Evaluation, Vermont Yankee*).

[5] *Id.* at 9, 17

[6] *Id.* at 9-13, Att. 1.

50.82(a).[7] Thus, not only must the NRC evaluate the transferee's financial circumstances, but it must also find that its financial representations, and how it intends to pay for decommissioning, site cleanup, and spent fuel management, are reliable and sufficient.

At this stage, the Commonwealth need only show the existence of a genuine dispute that there currently exists "reasonable assurance" that Holtec can pay for the activities described in its PSDAR, including decommissioning, site restoration, and spent fuel management.[8] Here, Holtec is relying solely upon Pilgrim's Trust Fund as both the means to show that it is financially qualified to hold the license and to satisfy its decommission and spent fuel management financial assurance obligations, Answer 17. Yet, Holtec's own cash flow analysis reveals that it only has a $3.615 million margin of error, Brewer Decl. ¶ 5. That same cash flow analysis shows that Holtec expects to draw down the Trust Fund at a remarkable rate: $855,331,000 between 2019 and 2025.[9] For perspective, that is an average withdrawal of $122,190,142 per year or $10,182,511 per month during that short period. At this rate of expenditure, the occurrence of even one of the decommissioning or site restoration contingencies outlined in the Commonwealth's Petition and supported by the declarations attached would cause Holtec to exceed its thin margin of error before the Commission even becomes aware of the issue vis-à-vis one of Holtec's annual financial reports. Thus, if Holtec experiences any amount of cost overrun above $3.615 million, which is extremely plausible considering the examples proffered by the Commonwealth and as further explained below, Holtec will not have any committed source of

[7] *Id.* at 5-9. *See* Entergy Nuclear Vermont Yankee, 83 Fed. Reg. 53,116 (Oct. 9, 2018).

[8] *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), 47 N.R.C. 142, 181 (Apr. 22, 1998) (citing *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), 43 N.R.C. 1, 9 (Jan. 16, 1996).

[9] DCE at 46-47, Tbl.5-1.

funding to cover those additional costs. Accordingly, the issue of financial assurances raised in Contention I "is material to the findings the NRC must make to support the action." 10 C.F.R. § 2.309(f)(1)(iv). And, at a minimum, the Commonwealth has demonstrated that the issue "is open to some question," which is the only showing it must make at this stage.[10]

Section 2.309(f)(1)(vi) requires the Commonwealth to "provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact." 10 C.F.R. § 2.309(f)(1)(vi). While the Commonwealth believes that, as further explained below, it has demonstrated that Holtec will face a shortfall in the Trust Fund, at this stage, the Commonwealth does not have to prove that a specific event will more likely than not cause a shortfall in the Fund.[11] Instead, to raise an admissible dispute with Holtec's financial assurance, the Commonwealth may assert, with supporting documentation, that Holtec's cost-and-revenue estimates fail to provide a realistic outlook for Pilgrim.[12]

The LTA is insufficient because Holtec's financial assurance, including its cash flow analysis, is based on broad, conclusory statements, and assumptions that are not available for review. The Commonwealth raises numerous realistic scenarios, many of which have occurred at other decommissioning nuclear plants, that could necessitate costly additional work or extended delays that quickly drive Holtec's costs well beyond its estimate. Based on the conclusory statements in Holtec's Cost Estimate and a complete lack of detail regarding the assumptions underpinning its cash flow analysis, however, it is unclear whether Holtec considered these realistic possibilities.

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[10] *Gulf States Utils. Co.*, 40 N.R.C. at 52.

[11] *See N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 222; *Gulf States Utils. Co.*, 40 N.R.C. at 51.

[12] *See N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 222.

The Commonwealth is not predicting that each one of these scenarios will come to pass. Rather, the contingencies described in the Commonwealth's Petition are events that Holtec will likely face if the NRC grants the LTA and Exemption Request and thus becomes obligated to decommission Pilgrim, restore the site, and manage the spent nuclear fuel for as long as it remains onsite. Indeed, the Applicants are not incorrect that many of the examples could apply to any plant, not just Pilgrim. Answer 30. This, however, is precisely the point. They could easily happen at any plant, including Pilgrim. Yet, what applies specifically to Pilgrim, is that the LTA fails to provide details necessary to ascertain whether these likely events are accounted for in Holtec's cost estimate. Thus, the Commonwealth raises an admissible, material dispute with Holtec's cash flow analysis and cost estimate because Holtec has failed to provide sufficient information to demonstrate that it has adequate funds to cover all of the costs and plausible contingencies associated with the decommissioning, restoring the site, and managing Pilgrim's spent nuclear fuel. In other words, the Commonwealth's contention questions whether Holtec's cost estimate is based on a reasonable outlook for Pilgrim—an issue that is clearly "challengeable."[13]

The Applicants argue in their Answer that Contention I falsely presumes that financial assurance must "amount[] to a guarantee that the estimated costs of decommissioning and spent fuel management will not be exceeded," and also that the NRC "'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.'" Answer 19-20, 30 (citing *N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 221-22 (emphasis removed)). However, this mischaracterizes both the Commonwealth's position and the standard of review at the contention admissibility phase.

[13] *N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 221.

First, the Commonwealth is not asking for a perfect prediction of every possible cost. Rather, the Commonwealth is asserting that Holtec's cost-and-revenue estimates in the LTA and DCE do not demonstrate a realistic outlook for Pilgrim because it is not apparent that the estimates cover certain likely events that could easily cause a shortfall in the Trust Fund. This contention, as the Commission previously remarked, "lie[s] at the core of the NRC's license transfer inquiry."[14]

Second, the question of whether the Commonwealth has adequately pleaded this contention does not turn on the ultimate standard for approving the requested action, as the Applicants suggest. Answer 19-20. To the contrary, that is the purpose of the hearing. At this stage, the Commonwealth must only show with supporting documentation that there exists a material dispute warranting further inquiry.[15] Here, the Commonwealth is disputing whether the LTA and the PSDAR and DCE sufficiently demonstrate that adequate funds will exist in the Trust Fund for Holtec to pay for all of its likely costs by identifying plausible, realistic events with supporting declarations that do not appear to have been considered in the cash flow analysis and which could prematurely deplete the Trust Fund. As the Commission also previously remarked, it "cannot [simply] brush aside such economically based safety concerns without giving the [Petitioner] a chance to substantiate its concerns at a hearing[.]"[16]

The Applicants repeatedly claim that the NRC's oversight and reporting requirements during decommissioning and onsite spent fuel management provide reasonable assurance that funding will remain adequate for both decommissioning and spent fuel management and falsely state that the Commonwealth is challenging these regulations. Answer 20-22, 30. To be clear,

[14] *Id.* at 219.

[15] *Id.*

[16] *Id.* at 222.

the Commonwealth is not challenging the NRC's oversite and reporting requirements. Instead, the Commonwealth is claiming that this particular LTA and the related PSDAR and DCE lack a sufficiently detailed financial demonstration to allow Holtec to satisfy its obligation to demonstrate adequate financial qualification or assurance.[17]

The Applicants' argument is also substantially incorrect for several reasons. First, the Applicants' claim that the reporting requirements *alone* are sufficient to demonstrate adequate financial assurance is circular and defies common sense. If, for example, the Applicants were correct, then any contention alleging financial or economic concerns would be inadmissible because there would always be sufficient financial assurance, which is not the case.[18] Likewise, an applicant could simply rely on future reporting as a means to satisfy their present regulatory obligation and choose not to submit any financial assurance at all during the license transfer application process. Precisely because this circular logic makes no sense, the Commission has already flatly rejected it in the case that the Applicants' themselves cite. Answer 20; *see also N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 222 (rejecting applicant's attempt to conflate compliance with the regulation's filing requirement with compliance with the regulation's financial assurance standard). As the Commission noted in that decision, a contrary conclusion would also force the Commission to accept an applicant's estimates and preclude the agency from "look[ing] behind them."[19]

Second, the Applicants contradict themselves regarding the source of Holtec's financial assurances. The Exemption Request states that if a future funding shortfall is revealed in one of

[17] *See N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 221.

[18] *See N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 222; *Gulf States Utils. Co.,* 40 N.R.C. at 51.

[19] *N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 221.

Holtec's annual financial assurance reports, then Holtec will include in that report additional financial assurance to cover the additional cost to complete decommissioning, or a plan to obtain additional funds if the shortfall concerns spent fuel management. Answer 20-21 (citing LTA, Encl. 2 at E-4). The Applicants also state baldly in their Answer that "HDI and Holtec Pilgrim have substantial means to provide additional financial assurance." *Id.* 22-23. These unsupported assertions, however, are contradicted by the Applicants' statement that "Holtec Pilgrim and HDI are basing their financial qualifications on the adequacy of the [Trust Fund] and are *not* relying on any parent support agreement or any other form of supplemental financial assurance to support their financial qualifications," Answer 17 (emphasis added), and their statement in the LTA that "Holtec will be responsible for funding the costs of decommissioning, spent fuel management, and site restoration" and money for those payments will derive entirely from the Trust Fund. LTA 16-17. Whichever the case may be, neither position demonstrates adequate financial assurance.

If, on the one hand, Holtec's only source of funding is the Trust Fund (as it states in the Application), and there is a shortfall in a future year, then the Trust Fund is depleted and there are no other forms of supplemental financial assurance to support Holtec Pilgrim and HDI.[20] If, on the other hand, Holtec Pilgrim and HDI "have substantial means to provide additional financial assurance" (an assertion that lacks any credibility since both entities have zero assets of their own), then there is an insufficient demonstration that these additional financial assurances

[20] The Applicants suggest that if there were insufficient funds to complete DECON, then it would place Pilgrim in SAFSTOR until such time that the Trust Fund grows to complete decommissioning. Answer 27. However, this cannot be assumed. If the Trust Fund is depleted, then the likelihood that the Trust Fund will grow back sufficiently at only 2 percent a year to complete decommissioning before the NRC's 60-year deadline is far from certain. Regardless, this is a conclusory statement with no support.

could exist because there currently exists no proposed or committed parental guarantee, surety, or other contemplated financing mechanism. Indeed, other than that bald assertion, the Applicants provide not even the slightest hint as to where these funds might come from or how Holtec Pilgrim and HDI might obtain them.[21]

Third, the Applicants cite to *Entergy Nuclear Vermont Yankee,* CLI-16-17 for the proposition that "'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.'" Answer 21 (citing *Entergy Nuclear Vermont Yankee,* CLI-16-17, 2016 WL 8729987, at *12). But that case is distinguishable and does not apply here. First, that case concerns a request for a hearing on a stand-alone exemption request.[22] The present case, in contrast, concerns a license transfer request, an exemption request, and an inadequate PSDAR and DCE where the transferee has made clear that its only source of money is the Trust Fund. Second, in that case, NRC staff already granted the exemption, and the NRC was reviewing the reasonableness of that determination.[23] Here, there is no prior determination by NRC Staff. Third, in that case, despite the oversight and reporting regulations, NRC Staff still reviewed the licensee's decommissioning cost estimates and funding to determine that there were sufficient funds available for

[21] The Applicants state in their Answer that they may rely upon a surety bond or parental guarantee (Answer 24), but aside from the obvious contradiction noted above and lack of any details supporting this claim, the Applicants have not committed to providing any such mechanism. Regardless, even if they did, Applicants cannot now attempt to resolve through extra commitments the concerns raised in a contention to defeat a properly pled intervention. It is for the NRC to determine at a hearing whether these extra commitments resolve the issues. *See Arizona Pub. Serv. Co.*, 34 N.R.C. at 156.

[22] *Entergy Nuclear Vermont Yankee*, CLI-16-17, 2016 WL 8729987, at *8.

[23] *Id.,* at *8-11.

decommissioning, upon which analysis the NRC relied.[24] Finally, when this issue arose again in an analogous context, the Commission required additional financial assurance to ensure compliance with the Commission's financial assurance requirements, thus largely repudiating the Commission's earlier statement in the narrower context.[25] Thus, this case does not stand for the proposition that the NRC's oversight and reporting alone provide adequate financial assurances.

The Applicants attempt to defend their cash flow analysis by stating that it contains conservatisms, namely the potential that DOE may reimburse them for Holtec's potential spent fuel management costs. Answer 22-25. Significantly, however, the Applicants stop short of making a commitment to put those potential recoveries back into the Trust Fund or even to hold them in a separate dedicated account available to pay for future costs associated with the plant. Answer 24. For that reason, the Applicants cannot now rely on potential DOE recoveries to demonstrate that adequate financial assurance exists to cover decommissioning, site restoration, and spent fuel management costs.

Even assuming Holtec now makes the commitment to use potential DOE spent fuel management cost recoveries as financial assurance, such a commitment cannot defeat the admissibility of the Commonwealth's contention. "[T]he question as to whether such a commitment would serve to satisfactorily resolve the concern raised in an otherwise adequately pleaded contention is a matter that now ought properly to be addressed after the contention is admitted."[26] Moreover, as a general matter, the NRC has refused to allow licensees to rely on

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[24] *Id.* at *10-11.

[25] *NRC Staff Safety Evaluation, Vermont Yankee* at 9-17; *see also* Entergy Nuclear Vermont Yankee, 83 Fed. Reg. 53,116 (Oct. 9, 2018).

[26] *Arizona Pub. Serv. Co.*, 34 N.R.C. at 156.

DOE recoveries to satisfy their financial assurance obligations.[27] And in the one instance cited by the Applicants where the NRC did allow such an occurrence at Vermont Yankee, it did so only under carefully proscribed terms, including requiring the licensee to obtain a performance bond to cover spent fuel costs if it failed to enter a settlement agreement with DOE by a certain date[28] *and* on the condition (suggested by the licensee) that it use only up to $20 million from the Vermont Yankee Trust Fund (on a revolving basis) to pay for spent fuel management costs.[29] It was on those bases that NRC Staff made the finding quoted in the Applicants' Answer, which states that the NRC Staff finds "that the assumption of DOE reimbursement is a reasonable source of additional funding." Answer 23 (quoting *NRC Staff Safety Evaluation, Vermont Yankee* at 15). Tellingly, Applicants make no mention in their papers of the critical details of the manner in which use of DOE funds at Vermont Yankee was limited and structured. Those circumstances, however, are not present in this case; Holtec has made no regulatory commitment of any sort on this issue.

The Applicants further argue that none of the examples the Commonwealth presents are sufficiently supported. Answer 29. The numerous, factually supported examples presented in the Commonwealth's Petition constitute such plausible reasons to question Holtec's cost

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[27] *Cf.* 10 C.F.R. § 50.75(e)(iii)(A) (chosen method of financial assurance must "guarantee that decommissioning costs will be paid"); *see* Entergy *Response to NRC's Request for Additional Information to Support the Review of the Vermont Yankee Nuclear Power Station Update to VY Spent Fuel Management Plan (TAC No. ME1152), dated May 20, 2009*, BVY 09-048, at 1 (Aug. 18, 2009) (ADAMS Accession No. ML092370298) (NRC noting that DOE "liability judgment does not guarantee the payment of damages in any certain amount or any payment date, and it could be overturned").

[28] *NRC Staff Safety Evaluation, Vermont Yankee* at 14-15; *see also* Entergy Nuclear Vermont Yankee, 83 Fed. Reg. 53,116 (Oct. 9, 2018).

[29] *NRC Staff Safety Evaluation, Vermont Yankee* at 14-15 n.2; *see also* Entergy Nuclear Vermont Yankee 83 Fed. Reg. 53,116 (Oct. 9, 2018).

estimate and "cannot [be] brush[ed] aside" at this stage based on the Applicants' repeated claims that those events will not happen to them.[30] Indeed, the Applicants' attempts to contravene the Commonwealth's factual assertions demonstrate that factual disputes exist that may only be resolved in a hearing. *Pa'ina Hawaii, LLC*, LBP-06-04, 63 N.R.C. 99, 112 (Jan. 24, 2006). Even so, the Commonwealth believes that some of these events will occur at Pilgrim and, therefore, will reply to some of Applicants' arguments against the likelihood of their occurrences.[31]

To begin, contrary to the Applicants' assertions, the Commonwealth proffered declarations that support its contention and are not speculative or conclusory. Answer 29. In this context, the Commission has said that the following statements are conclusory: "the application is 'deficient,' 'inadequate,' or 'wrong.'"[32] In contrast, the Commonwealth submitted over forty (40) pages of expert declarations describing in detail the significance of the Commonwealth's contentions. Declarations of Warren K. Brewer, David E. Howland, Paul W. Locke, John M. Priest, Jr., and Timothy Newhard. While the Applicants may not agree with the substance of those declarations, there is certainly enough "reasoned basis or explanation" for the NRC "to make the necessary, reflective assessment of the opinion[s]" and factual statements set forth in those declarations, as is demonstrated by the examples that follow.[33]

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[30] *See N. Atl. Energy Serv. Corp.*, 49 N.R.C. at 222.

[31] This section is not intended to respond to every argument made or position taken by the Applicants. Rather, it is intended to respond only to the extent necessary to assist the Commission (or the ASLB) in its deliberations. Silence by the Petitioner with respect to any issue addressed in the Applicants' Answer should thus not be construed as assent to its position.

[32] *USEC, Inc.* (American Centrifuge Plant), 63 N.R.C. 451, 472 (Apr. 3, 2006) (quoting *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), 47 N.R.C. 142, 181 (Apr. 22, 1998)).

[33] *Id.*

Regarding the possibility of work schedule delays, the Applicants' explanation of its 17 percent contingency allowance is misleading and misses the Commonwealth's point entirely that the contingency is inadequate for its broadly stated purpose and as compared to the industry. Pet. 22-23; Brewer Decl. ¶¶ 8-9.[34] The Entergy DCE for Pilgrim includes a contingency for the typical reasons found in DCEs, namely to cover events such as weather delays, equipment delays, and labor delays that are expected to occur in any project.[35] These are cost impacts that do not alter the project's scope and cannot be tied to a specific activity.[36] Such contingency is expected to be fully consumed over the course of the project.[37] This contingency expressly does not include any allowance for other types of risks including changes in scope.[38] The level of contingency in Entergy's DCE is 16.92 percent.[39]

Holtec describes its 17 percent contingency as providing for the typical cost impacts accounted for by Entergy's contingency and, *in addition*, providing for possible discrete events and changes in scope.[40] In his declaration, however, Mr. Brewer explained why Holtec's 17

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[34] Regarding the Applicants' references as to why the Humboldt Bay costs increased, *see* Answer 31, the largest single driver was inadequate initial assumptions concerning tritium contamination, which was discovered during decommissioning to be much worse and led to removal of the reactor caisson. Ltr. from Pacific Gas and Electric Company to NRC, *Decommissioning Funding Report for Humboldt Bay Power Plant, Unit 3; Humboldt Bay Power Plant, Unit 3*; Docket No. 50-133; License No. DPR-7, Encl. 4, at 32-33 (Apr. 1, 2013) (ADAMS Accession No. ML13093A028). The Applicants attempt to distinguish this example are thus wholly misplaced.

[35] Ltr. from Entergy, to NRC, *Post Shutdown Decommissioning Activities Report, Pilgrim Nuclear Power Station*; Docket No. 50-293; License No. DPR-35, Att. 1, § 3, at 3-5 (Nov. 16, 2018) (ADAMS Accession No. ML18320A034) (hereinafter, "Entergy PSDAR").

[36] *Id.*

[37] *Id.*

[38] *Id.*

[39] *Id.* at Att. 1, App. C, at 10.

[40] DCE at 39-41; Answer at 32-33.

percent contingency allowance calculation fails to adequately account for all plausible risks. Brewer Decl. ¶¶ 8-9. Holtec does not describe in its DCE how the same contingency in one case (Entergy) is only sufficient to cover events within a fixed scope of work, yet in the other case (Holtec) this same percentage is also sufficient to cover changes in scope of the project. The Commonwealth's criticism is that the DCE provides insufficient information to demonstrate that Holtec's 17 percent contingency is sufficient to cover both the cost impacts typically found in DCE contingencies, such as weather delays, *as well as* cost impacts from changes in the project's scope, such as the discovery and remediation of unknown contaminants.[41]

In their declarations, Brewer, Locke, Howland, and Priest presented concrete examples both of the types of non-radiological contamination that, in their expert opinion, Holtec is likely to discover in the course of decommissioning Pilgrim, and how the discovery of both radiological and non-radiological contamination at other sites caused actual costs to increase significantly beyond what was estimated in the absence of comprehensive site characterizations. Brewer Decl. ¶ 11; Locke Decl. ¶¶ 7-9; Howland Decl. ¶¶ 5-7; Priest Decl. ¶¶5-14. Regarding these issues, which could easily change the project's scope, the Applicants misrepresent the Commonwealth's contention. The Commonwealth does not have to prove at this time "that

[41] The Applicants point to Crystal River, Fort Calhoun, Oyster Creek, and Vermont Yankee DCEs, among others, as supporting the normalcy of expending the entire contingency. Answer 33 n.100. However, the contingency in these examples only covers the same type of things provided for by the contingency in the Entergy DCE for Pilgrim. Unlike Holtec, none of these other estimates include any contingency or allowance for risks such as changes in scope. Updated Site-Specific Decommissioning Cost Estimate for the Crystal River Unit 3 Nuclear Generating Plant, at xi (May 2018) (ADAMS Accession No. ML18178A181); Fort Calhoun Station, Site Specific Decommissioning Cost Estimate, at xi-xii (Feb. 2017) (ADAMS Accession No. ML17089A759); Decommissioning Cost Analysis for the Oyster Creek Nuclear Generating Station, at xii (March 2016) (ADAMS Accession No. ML16090A067); Vermont Yankee Nuclear Power Station, Site Specific Decommissioning Cost Estimate, at xii (Dec. 2014) (ADAMS Accession No. ML14357A110).

Applicants have overlooked significant sources of radiological or non-radiological contamination at the Pilgrim site." Answer 39. Nor is the Commonwealth challenging the adequacy of the NRC's monitoring and reporting rules.[42] Rather, the Commonwealth is asserting that Holtec does not concretely know at this time the extent of all contaminations at the Pilgrim site and has, based on the Commonwealth's experts' opinions, not prepared for when it will likely find unknown contamination because it has not factored it into its cash flow analysis. The Commonwealth is challenging Holtec's financial ability to address such possible contingencies.

Realistic experience in decommissioning nuclear power plants, including Yankee Rowe, Howland Decl. ¶ 5, and Humboldt Bay, Brewer Decl. ¶ 9,[43] is that Holtec will discover previously unidentified radiological and non-radiological contamination. Holtec's apparent belief that it is fully aware of the extent of all contamination at Pilgrim underscores its lack of experience in decommissioning nuclear power plants. Indeed, the Commonwealth is unaware of any domestic nuclear power station that has been owned and decommissioned by either Holtec or its beleaguered partner, SNC-Lavalin.[44] Yet, despite this inexperience, Holtec is simultaneously

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[42] Additionally, the Commonwealth is also not challenging NRC's 25 millirem standard for unrestricted release. *See* Answer 39. The Commonwealth is identifying that Pilgrim will also have to be prepared to meet the standards set by the U.S. Environmental Protection Agency since tritium is present in the groundwater at Pilgrim and it is possible that further investigation or future testing will reveal concentrations that exceed the federal standard (as has been indicated by past reports). Priest Decl. ¶ 8. It is unclear whether Holtec's cash flow analysis contemplates this standard. *Id.*

[43] *See also* Ltr. from Pacific Gas and Electric Company, to NRC, *Decommissioning Funding Report for Humboldt Bay Power Plant, Unit 3; Humboldt Bay Power Plant, Unit 3*; Dkt. No. 50-133; License No. DPR-7, Encl. 4, at 32-33 (Apr. 1, 2013) (ADAMS Accession No. ML13093A028).

[44] *See, e.g.*, Allison Lampert, *Canada's SNC Lavalin Eyes Ways to Protect Business Amid Political Crisis*, Reuters, Mar. 22, 2019, https://www.reuters.com/article/us-canada-politics-snc-lavalin/canadas-snc-lavalin-eyes-ways-to-protect-business-amid-political-crisis-idUSKCN1R32TN; Sandrine Rastello & Laura Millan Lombrana, *SNC-Lavalin 'Appalled' and 'Surprised' as Chilean Miner Codelco Cancels $260-Million Contract*, Bloomberg News, Mar.

seeking to own and decommission a second nuclear power station, Oyster Creek Nuclear Generating Station.[45] Indeed, NRC Staff recently issued a request for additional information, which seeks "information that justifies that [Holtec's] management and technical support organization will have sufficient resources (i.e., corporate structure, management and technical support organization staff capacities, internal procedures, etc.) to conduct licensed activities at multiple sites."[46] This inexperience, coupled with Holtec's proposed accelerated decommissioning time frame and the fact that it is seeking to oversee decommissioning work at multiple sites at the same time, jeopardizes Holtec's abilities and increases the risk of a cost overrun. Pet. 23-24. And the NRC Staff's information request on this issue reinforces this point and shows why a hearing is required.

Holtec's statements that it is fully aware of all contamination at Pilgrim is belied by its plan to assess the site. Holtec plans to assess the site as the project advances. This iterative approach lends credence to the fact that unknown contamination will be discovered during the project. If Holtec knew the extent of all contaminates at Pilgrim currently, then an iterative assessment would not be necessary. This demonstrates the flaw in Holtec's reasoning that the

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26, 2019, https://business.financialpost.com/commodities/mining/snc-dealt-another-blow-with-copper-mine-project-cancellation.

[45] *See generally,* Ltr. from Exelon Generation, to NRC, *Application for Order Approving Direct Transfer of Renewed Facility Operating License and General License and Proposed Conforming License Amendment, Oyster Creek Nuclear Generating Station*, Docket Nos. 50-219 & 72-15, License No. DPR-16 (Aug. 31, 2018) (ADAMS Accession No. ML18243A489); NRC, *Request for Additional Information, License Transfer Request, Entergy Nuclear Operating, Inc., Pilgrim Nuclear Power Station* (Mar. 21, 2019) (ADAMS Accession No. ML19086A349).

[46] NRC, *Request for Additional Information, License Transfer Request, Entergy Nuclear Operating, Inc., Pilgrim Nuclear Power Station*, at 3 (Mar. 21, 2019) (ADAMS Accession No. ML19086A349)

current documentation regarding site contamination is sufficient. Regardless, Holtec does not appear to have adequately accounted for future discoveries in its cost estimate.[47]

Regarding the possibility that DOE might require repackaging of spent nuclear fuel into new cannisters, the Petition indicates, as supported by the Brewer Declaration, that *Entergy itself* has previously argued "that DOE has the authority to mandate licensees to repackage spent fuel into DOE-approved transportation casks." Brewer Decl. ¶ 13; Pet. 14. The cited case indicates that as the Standard Contract is currently written, the licensee will have to repackage the spent nuclear fuel into DOE-approved transportation casks. *Systems Fuels, Inc. v. United States*, 818 F. 3d 1302, 1306-07 (Fed. Cir. 2016); Brewer Decl. ¶ 13. The Commonwealth does not dispute that Pilgrim's spent nuclear fuel is currently being placed into multi-purpose canisters. The Commonwealth is, however, disputing that these multi-purpose cannisters qualify as casks approved and supplied by DOE for transportation as outlined in the Standard Contract. *Id.*; *see also* 10 C.F.R. § 961.11. Absent a change to the Standard Contract, DOE "shall arrange for, and provide, a cask(s) and all necessary transportation of the SNF." 10 C.F.R. § 961.11; Brewer Decl. ¶ 13. It will then be Holtec's responsibility to "arrange for, and provide, all preparation, packaging, required inspections, and loading activities necessary for the transportation of [spent nuclear fuel] . . . to the DOE facility." *Id.* Holtec's cost estimate does not account for the activities required to load a bare-fuel DOE cask. While it is unknown at this time precisely what the cost will be to repackage the spent nuclear fuel into DOE-approved casks, it can be

[47] Holtec further asserts that its "decommissioning was compared to costs from similar activities from seven other decommissioned BWR nuclear power plants." Answer 36, 42 (citing DCE at 37). However, the Commonwealth is not aware of any large commercial BWRs that have been decommissioned in this country, meaning that there is no existing domestic data, following NRC regulations, to benchmark decommissioning costs against. The Commonwealth is unable to confirm which seven BWR plants Applicants are referring to because they have not identified those BWR plants in their Answer. *See* Answer 36, 42; DCE at 37.

reasonably presumed that it will cost more than the $3.615 million remaining in the Trust Fund at the end of Holtec's decommissioning cost estimate, which would lead to a shortfall.[48]

In the alternative, if DOE does not require repackaging into new DOE-approved casks and instead accepts the spent nuclear fuel as-is, then DOE's position[49] will likely be to seek to recover the original spent nuclear fuel packaging costs paid by DOE to the licensee because, under the Standard Contract, it is the licensee's responsibility to package the fuel. 10 C.F.R. § 961.11; Brewer Decl. ¶ 14. Entergy has recovered about $6 million for packaging spent nuclear fuel so far, which includes loading three casks and beginning work on five more. Brewer Decl. ¶ 14. Assuming a comparable cost for the balance, the cost to package the rest will run in the tens of millions because Holtec estimates that it will need to package and load at least forty-four additional casks.[50] If Holtec receives DOE reimbursement for these packaging costs, which is Holtec's assumption, Answer 23, yet DOE accepts the casks as-is, also Holtec's assumption, Brewer Decl. ¶ 14, then because the licensee is responsible for packaging costs, DOE could attempt to recover those initial packaging reimbursements from Holtec. This, too, is a reasonable outcome that Holtec has failed to account for in its DCE.

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[48] Pilgrim's spent fuel pool will be dismantled by the time any repackaging will need to take place. Brewer Decl. ¶ 13. Thus, to repackage the fuel, it will need to be brought to another plant site with a spent fuel pool, or a Dry Transfer Station will need to be built at Pilgrim, which will cost approximately $150 to $450 million. *Id.* (citing U.S. Government Accountability Office, Nuclear Waste Management: Key Attributes, Challenges, and Costs for the Yucca Mountain Repository and Two Potential Alternatives 55 (GAO-10-48) (Nov. 2009), https://www.gao.gov/assets/300/298028.pdf.)

[49] *Cf. Systems Fuels, Inc.*, 818 F.3d at 1307 (DOE's position against paying original packaging costs is that modification of Standard Contract allowing DOE to accept casks as-is for transportation would place burden of original costs for packaging upon licensee).

[50] DCE at 25.

Regarding the possibility that DOE fails to remove the spent nuclear fuel by 2062, the Applicants still fail to explain their assumption that DOE will begin to accept Pilgrim's spent nuclear fuel in 2030. Pet. 18-19. The Applicants state that the timeline for DOE removal was based on "the DOE Acceptance Priority Ranking & Annual Capacity Report (Reference 10)" and DOE's "Strategy for the Management and Disposal of Used Nuclear Fuel and High Level Radioactive Waste" (Reference 9) ("Strategy for the Management and Disposal of Used Nuclear Fuel"). Answer 46 & n.134 (citing LTA, at 24). But neither of these sources actually indicates that DOE will begin removing fuel from Pilgrim in 2030. Indeed, the DOE Strategy for the Management and Disposal of Used Nuclear Fuel makes clear that the report "represents an initial basis for discussions among the Administration, Congress and other stakeholders on a sustainable path forward for disposal of nuclear waste," *id.* at 1, and its proposed plan to develop both a pilot interim storage facility and a larger interim storage facility depend on "appropriate authorizations from Congress," *id.* at 2. Congress, however, has not authorized such a plan or appropriated any money to-date to further it. Based on this fact, a recent Congressional Research Service report on the issue concluded that "longer on-site storage is almost a certainty." Congressional Research Service, *Civilian Nuclear Waste Disposal* 42 (2018); *see infra* pp. 37-38 (addressing issue in context of Contention II).

The Applicants also cite to *Entergy Nuclear Vermont Yankee*, CLI-16-17for the proposition that, "with regard to the fuel-costs claim, … [the Commission] finds the short-term period of storage most likely."[51] While the Commonwealth disputes this prior finding,[52] it

[51] Answer 46-47 n.136 (citing *Entergy Nuclear Vermont Yankee*, CLI-16-17, at *12 (footnote omitted)).

[52] The Commonwealth is not alone in this regard as the Atomic Safety and Licensing Board found in a separate proceeding regarding Vermont Yankee that "the indefinite storage of spent fuel on-site is a very possible outcome." *Entergy Nuclear Vermont Yankee, LLC* (Vermont

further undermines the reasonableness of Holtec's cost estimate because the short-term period of storage referenced by the NRC in *Entergy Nuclear Vermont Yankee*refers to section B-2 of Appendix B of NUREG-2157,[53] which states that "the NRC believes that the most-likely scenario is that a repository will become available to dispose of spent fuel by the end of the short-term timeframe (within 60 years of the end of a reactor's licensed life for operation)."[54] Applied to Pilgrim, the NRC approved the current facility operating license until June 8, 2032.[55] However, using the date that Pilgrim will cease operations of June 1, 2019, the short-term period of storage places the availability of a DOE repository at 2079.[56] This places the timeframe for DOE removal of spent nuclear fuel well beyond the Applicants' timeframe.[57]

Yankee Nuclear Power Station), LBD-15-24, 2015 WL 5883370, at *12 (Aug. 31, 2015). While, as the Applicants note, that decision was later vacated as moot because Entergy withdrew the application that gave rise to the proceeding, *see In re Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-16-8, 83 N.R.C. 463 (June 2, 2016), the Commission has made clear that such decisions can still be cited as "persuasive authority." *Southern California Edison Co*. (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-13-10, 2013 WL 9638165, at *3 n.42 (Dec. 4, 2013).

[53] *Vermont Yankee,* 84 N.R.C. at 118 n.86 (citing *Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel*, app. B, at B-2 (NUREG-2157) (2014)).

[54] *Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel*, App. B, at B-2 (NUREG-2157) (2014).

[55] LTA, Encl. 1 at 2.

[56] Despite the NRC's reliance on the short-term timeframe, the NRC stated that it "continues to believe that 25 to 35 years is a reasonable period for repository development (i.e., candidate site selection and characterization, final site selection, licensing review, and initial construction for acceptance of waste)." NUREG-2157, App. B, at B-8-B-9. The NRC published NUREG-2157 in September 2014. Thus, even assuming this shorter timeframe, which it should not, the earliest Applicants can expect a DOE repository available for Pilgrim's spent nuclear fuel is 2039, nearly a decade after the assumption in the LTA.

[57] Additionally, as stated above, *Vermont Yankee* deals with an exemption request, not a license transfer request. When the NRC approved the license transfer for Vermont Yankee, it required additional financial assurances, including a performance bond to cover DOE settlement funds and a support agreement of $140 million. *NRC Staff Safety Evaluation, Vermont Yankee*, at 15-17.

This dispute in the timeframe of spent nuclear fuel removal is material because it jeopardizes the Applicants' financial ability to maintain the fuel. The Applicants suggest that this does not represent a genuine material dispute because Holtec could seek to recover from DOE the additional costs it will undoubtedly incur due to DOE's failure to remove all spent fuel from Pilgrim by 2062. Answer 47. However, as previously stated, even assuming Holtec could rely upon DOE reimbursement funds as financial assurance, Holtec has not made any commitment whatsoever to place DOE reimbursement funds back into the Trust Fund or even to hold those recoveries in a separate account to cover costs incurred at Pilgrim. Thus, even assuming Holtec does not incur the other spent fuel management-related costs outlined in the Commonwealth's Petition, because the estimated annual cost for managing spent nuclear fuel is approximately $7.2 million,[58] and there is only a projected balance of $3.615 million remaining in the Trust Fund after 2063,[59] if DOE delays removal of spent nuclear fuel by even a single year, which it will according to the NRC's analysis, Holtec's costs will exceed the remaining balance of the Trust Fund.

B. The Commonwealth Raises an Admissible Challenge to the No Significant Hazards Consideration.

The Commonwealth raises an admissible challenge to the NRC Staff's finding of "no significant hazards consideration" because the license amendment contains a substantive change: the proposed removal of the $50 million contingency. The NRC's generic finding in 10 C.F.R. § 2.1315 states that, "any amendment to the license of a utilization facility or the license of an [ISFSI] 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

[58] DCE at 46-47.

[59] DCE at 47.

and safety of the public will be significantly affected.'" 10 C.F.R. § 2.1315. Contrary to the Applicants' assertions, Answer 15-16, the Commonwealth is not challenging the NRC's generic finding in this regulation. Instead, the Commonwealth is challenging the application of this finding to the LTA because the license amendment "does more than conform the license to reflect the transfer action."

As stated in the Petition, the NRC included the $50 million contingency fund requirement in 1999 as a condition of the approved transfer of Pilgrim's operating license from Boston Edison Company to Entergy. Pet. 5. To the extent that this fund was not used for operating and maintenance expenses,[60] it was anticipated that it would be used for decommissioning costs. *See infra* pp. 31-32 (elaborating on basis for inclusion of $50 million contingency license condition). When the operating license was renewed in 2012, this contingency fund condition was retained. Now, the Applicants quietly ask the Commission to remove this condition from the license. While the LTA itself is completely silent on the basis for this request, *see generally* LTA, the Applicants now state that removing this condition simply conforms the license to reflect the transfer because: (1) Entergy "is extinguishing its interest in and responsibility for Pilgrim," and (2) Holtec Pilgrim and HDI will not be relying on any other form of financial assurances other than the Trust Fund. Answer 17.

The potential transfer of Pilgrim's license from Entergy to Holtec and the resulting extinguishment of Entergy's interests in Pilgrim does not necessitate the removal of this condition because Entergy is not implicated anywhere in this condition. The condition states:

> [ENGC] shall have access to a contingency fund of not less than fifty million dollars ($50m) for payment, if needed, of Pilgrim operating and maintenance

[60] Applicants do not provide the current status of this contingency fund in the LTA and do not state that the fund has been used at all. The Commonwealth presumes from the Applicants' Answer that this fund is still intact.

> expenses, the cost to transition to decommissioning status in the event of a decision to permanently shut down the unit, and decommissioning costs. [ENGC] will take all necessary steps to ensure that access to these funds will remain available until the full amount has been exhausted for the purposes described above. [ENGC] shall inform the Director, Office of Nuclear Reactor Regulation, in writing, at such time that it utilizes any of these contingency funds. This provision does not affect the NRC's authority to assure that adequate funds will remain available in the plant's separate decommissioning trust fund(s), which [ENGC] shall maintain in accordance with NRC regulations. Once the plant has been placed in a safe-shutdown condition following a decision to decommission, [ENGC] will use any remainder of the $50m contingency fund that has not been used to safely operate and maintain the plant to support the safe and prompt decommissioning of the plant, to the extent such funds are needed for safe and prompt decommissioning.

Nowhere in this condition is Entergy (that is, Entergy Corporation) or any of ENGC's parent companies mentioned. This condition is expressly imposed on ENGC and no other entity. And the legal entity currently known as ENGC is not changing. Indeed, as the Applicants concede in the LTA, while "ENGC will immediately change its name to Holtec Pilgrim, LLC . . . the same legal entity will continue to exist as the owner of Pilgrim before and after the transfer of control."[61] Thus, the only "conforming" change to this condition necessitated by the potential transfer of the license is changing the name from ENGC to Holtec Pilgrim.

Additionally, ENGC/Holtec Pilgrim's decision to only rely upon the Trust Fund and no other supplement financial assurance is not an effect of the transfer—it is a conscious choice they made. The Applicants provide no reasonable connection between the transfer of indirect control of ENGC/Holtec Pilgrim and the policy decision to only rely upon the Trust Fund. Accordingly, ENGC/Holtec Pilgrim's unilateral view that this condition is no longer necessary is not "conform[ing] the license to reflect the transfer action," and the NRC's generic determination

[61] LTA, cover letter, at 2. The proposed transaction would involve transferring 100 percent of the equity interests in ENGC from ENGC's parent companies to Holtec. *Id.* at 1-2. Thus, while indirect control of ENGC will change, ENGC itself will continue to exist and operate under its new name, Holtec Pilgrim. *Id.*

in 10 C.F.R. § 2.1315 does not apply. Moreover, as explained more fully below, the proposed removal of the $50 million condition is substantive in nature and thus precludes reliance on the NEPA categorical exclusion to avoid consideration of the potential direct and indirect environmental consequences of the proposed action. This fact is significant in this context as well because the NRC must comply with NEPA before taking any action on the LTA or Exemption Request.

II. Contention II also Satisfies 10 C.F.R. § 2.309(f)(1)'s Admissibility Requirements.

"NEPA establishes environmental protection as an integral part of the . . . Commission's basic mandate."[62] "The primary responsibility for fulfilling that mandate lies with the Commission."[63] Accordingly, for the reasons stated in the Commonwealth's Petition, *before* the Commission makes a decision, it "must itself take the initiative of considering" the potential environmental consequences of the entirety of the Proposed Action presented to it[64]—a request to transfer Pilgrim's license to an asset-less limited liability company and to eliminate an existing $50 million contingency condition the NRC imposed to cover, in part, decommissioning costs, a request for an unconditional exemption to use Pilgrim's Trust Fund for decommissioning, site restoration (including non-radiological decontamination), and spent fuel management (potentially indefinitely), and a PSDAR and DCE that propose to perform that work at a pace that has never before been achieved (or even attempted). This Proposed Action, as the Commonwealth explained in its Petition and explains further below, gives rise to a reasonably foreseeable possibility of a funding shortfall to fulfill the proposed licensee's decommissioning,

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[62] *Calvert Cliffs' Coordinating Comm. Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971).

[63] *Id.* at 1119.

[64] *Id.*

site restoration, and spent fuel management obligations and associated environmental, public health and safety, and economic effects. The Commonwealth is thus also entitled to a hearing on this Contention.

A. The Commonwealth, as the Applicants Tacitly Concede, is Not Challenging the Categorical Exclusion but Instead its Inapplicability to the Facts of this Case.

The Applicants' argument that Contention II constitutes "an impermissible challenge to 10 C.F.R. § 51.22(c)(21)" is unfounded. Answer 50. Indeed, in the very next paragraph the Applicants concede that the Commonwealth is not in fact challenging the legality of the categorical exclusion itself but is instead challenging whether that specific categorical exclusion "appl[ies] to the Pilgrim license transfer" at all, *id.*, and, if it does, whether special circumstances exist based on the facts of this case that preclude reliance on it, *id.* 52-53. Given their tacit concession, the Applicants' inconsistent claim is specious and must be summarily rejected just as it has been in other similar circumstances. *Entergy Nuclear Vt. Yankee, LLC* (Vermont Yankee Nuclear Power Station, CLI-16-17, 84 N.R.C. 99, 2016 WL 8729987, at *17 (Oct. 27, 2016) (ignoring NRC Staff's argument that Vermont's claim that granting exemption to Entergy to use Vermont Yankee's Decommissioning Trust Fund for spent nuclear fuel management costs was ineligible for cited categorical exclusion); *Pa'ina Hawaii, LLC*, LBD-06-4, 63 N.R.C. at 110 (rejecting applicant and NRC Staff arguments that contention regarding applicability of categorical exclusion constituted an improper challenge to categorical exclusion). Indeed, in *Entergy Nuclear Vt. Yankee, LLC*, the Commission rejected the argument, held the cited categorical exclusion did not apply, and directed the NRC staff to conduct an environmental assessment on the potential environmental consequences of granting Entergy an exemption to use Vermont Yankee's Decommissioning Trust Fund for non-decommissioning costs. *Entergy*

Nuclear Vermont Yankee, CLI-16-17, 2016 WL 8729987at *18-19. For the reasons that follow, the same result is required here.

The Applicants' merits-based arguments fare no better than their procedural one. As an initial matter, the Applicants argue—for the first time—that eliminating the $50 million contingency license condition for decommissioning costs is "required"—as that term is used in the categorical exclusion, 10 C.F.R. § 51.22(c)(21)—to approve the requested license transfer. Answer 51.[65] That is plainly wrong. Here, the only *required* change is the one the Applicants have proposed elsewhere in the license—substituting "Holtec Pilgrim" for "Entergy Nuclear" (ENGC) in the $50 million contingency license condition. *See* LTA Encl. 1, Attach. A, 1-5. Nothing about the transaction requires anything more than that *administrative* change, and, as the Commonwealth previously explained, but the Applicants completely ignore, that is the only type of "administrative amendment" that the categorical exclusion contemplates. Pet. 34 (quoting Streamlined Hearing Process for NRC Approval of License Transfers, 63 Fed. Reg. 66,721, 66,728 (Dec. 3, 1998)). While the Applicants, and Holtec in particular, clearly would prefer elimination of that condition, amending the license to effectuate that preference is neither mandated by the proposed transaction, nor administrative. Instead, it is "substantive in nature,"[66] because it eliminates $50 million that would otherwise be available to fund decommissioning activities in the event of the funding shortfall the Commonwealth demonstrates is possible in Contention I. LTA Encl. 1, Attach. A, at 4 (Condition J (4)).

[65] The Applicants, again, failed to acknowledge this condition at all in their explanation for why NRC Staff should invoke the categorical exclusion in this case. LTA, Encl. 1, at 20.

[66] *See Entergy Nuclear Vermont Yankee,* CLI-16-17, 2016 WL 8729987 at *18.

Neither Holtec's reliance on the Trust Fund nor the history surrounding the $50 million contingency condition justify a different conclusion.[67] Indeed, the historical basis for the condition provides further evidence of its substantive nature and, in fact, requires retaining it. Contrary to the Applicants' revisionist description, the Commission added the $50 million contingency condition even though (i) "Entergy . . . ha[d] fulfilled its requirements under 10 CFR 50.33(f), 'to demonstrate to the Commission the financial qualification . . . to carry out . . . the activities for which the permit or license [was] sought,'"[68] and (ii) "ha[d] complied with the requirements in 10 CFR 50.75(b) with respect to the amount of decommissioning funds."[69] In other words, the NRC added that condition *in spite* of Entergy's satisfaction of the NRC's financial assurance requirements, and retained it when it renewed Pilgrim's license in 2012 for an additional twenty year period.[70] The Commission's reason for retaining the condition applies with even more force today because Holtec will have no source of revenue at all: Pilgrim's only source of revenue, as a merchant reactor, is selling power on the competitive wholesale market

[67] The fact, for example, as Entergy argues elsewhere is that Entergy International would no longer provide the funds to comply with this condition is true, but beside the point, Answer 17 n.62, because if the license is transferred, Holtec International or some other affiliate may provide the funds to satisfy Holtec Pilgrim's obligation.

[68] Safety Evaluation by the Office of Nuclear Reactor Regulation Proposed Transfer of Operating License and Materials License for Pilgrim Nuclear Power Station, Dkt. No. 50-293, at 9 (Apr. 29, 1999) (1999 Safety Evaluation), *in Order Approving the Transfer of Facility Operating License and Materials License for Pilgrim Nuclear Power Station, from Boston Edison Company to Entergy Nuclear Generation Company, and Approving Conforming Amendments*, Dkt. No. 50-293, Encl. 3 (Apr. 29, 1999) (ADAMS Accession No. ML011910099).

[69] *Id.* at 10.

[70] NRC, *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc., Docket No. 50-293, Renewed Facility Operating License*, Renewed License No. DPR-35, at 4, ¶ J(4) (May 29, 2012) (ADAMS Accession No. ML052720275). This is why the license condition itself indicates that examination of whether financial assurance exists occurs independent of the $50 million contingency allowance. *Id.*

and any "extended shutdown or similar event," as the staff wrote in 1999, would eliminate Entergy's only additional source of money to maintain the plant safely.[71] The NRC Staff's position in that proceeding was consistent with the Commission's general view, expressed three years earlier, that the advent of utility deregulation "may . . . require *additional* decommissioning funding assurance for those licensees that are no longer able to collect full decommissioning costs in rates or set their own rates."[72] It is undisputed here that neither Entergy nor Holtec can seek to secure additional funds through a rate proceeding. Further, because Pilgrim will no longer be operating, its only source of revenue, selling power on the wholesale market, will no longer exist. Thus, retaining this $50 million contingency condition is even more important now to ensure Holtec's financial assurance.

The Commonwealth also has, but does not need to, demonstrate that eliminating the $50 million contingency condition may have potential environmental consequences. Answer 51.[73] That is because if the categorical exclusion does not apply, the NRC *must* conduct at least an environmental assessment to consider the potential direct and indirect environmental consequences of eliminating the license condition. *See* 10 C.F.R. § 51.22(b) (stating that an environmental assessment is *not* required only if the proposed action is covered by a categorical exclusion and special circumstances do not exist). The Commission's decision in *Entergy Nuclear Vermont Yankee, LLC*, CLI-16-17 is instructive on this point. In that case, Entergy requested an exemption to use Vermont Yankee's Decommissioning Trust Fund for non-

[71] *Id.* at 10.

[72] Decommissioning of Nuclear Power Reactors, 61 Fed. Reg. 39,278, 39,285 (Jul. 29, 1996) (emphasis added).

[73] *Cf. Jones v. Gordon*, 792 F.2d 821, 828 (9th Cir. 1986) ("An 'agency cannot . . . avoid its statutory responsibilities under NEPA by merely asserting that an activity it wishes to pursue will have an insignificant effect on the environment.'" (quotation omitted)).

decommissioning costs. 2016 WL 8729987, at *18-19. However, the Commission held that the categorical exclusion the NRC Staff relied on to grant the exemption *did not apply* and "direct[ed] the Staff to conduct an environmental assessment to examine the environmental impacts." *Id.* The Commission reached that conclusion despite having already found on the facts of that case that adequate decommissioning funds would exist even if the exemption were granted and without making any finding that allowing the exemption would cause environmental impacts. *Id.* And the Commission reached that decision, because, as the agency's regulations dictate and as NEPA requires, the Commission must prepare at least an environmental assessment to assess what potential environmental consequences may flow from an action that does not fit within a categorial exclusion. 10 C.F.R. § 51.22(b); *Wilderness Watch v. Mainella*, 375 F.3d 1085, 1096 (11th Cir. 2004) (finding agency violated NEPA where proposed action did not fit within categorical exclusion).

Even if the categorical exclusion did apply in this case, which it clearly does not, contrary to Applicants' allegations, there is a genuine, material dispute as to whether special circumstances exist in this case that would preclude the NRC Staff's reliance on the cited categorical exclusion. Answer 53.[74] It is beyond dispute that a decommissioning trust fund shortfall may pose significant environmental and public health and safety consequences. *See generally*, *e.g.*, General Requirements for Decommissioning Nuclear Facilities, 53 Fed. Reg. 24,018, 24,033 (June 27, 1988). Indeed, for this reason, the Commission long ago emphasized that a "*high degree* of assurance is required from the nuclear facility licensee that adequate funds

[74] The Applicants misleadingly suggest that the Commonwealth claimed that the Council on Environmental Quality's regulation requiring federal agencies to provide for extraordinary circumstances, which, when present, preclude reliance on a categorical exclusion sets the standard for showing when "special circumstances" exist under the NRC's regulations. Not so, as the Commonwealth's Petition makes clear. Pet. 33.

are available to decommission the facility" so that the agency can comply with its "responsibility to protect public health and safety." Decommissioning Criteria for Nuclear Facilities; Notice of Availability of Draft Generic Environment Impact Statement, 46 Fed. Reg. 11,666, 11,667 (Feb. 10, 1981) (emphasis added).[75] And the Applicants' argument that the Commonwealth has "raised no material dispute with" the Applicants' financial assurance showing is incongruous with the Commonwealth's first Contention, which focuses exclusively on a myriad of ways in which Holtec could exceed, by significant margins, the amount of money in the Trust Fund—Holtec's only claimed and committed source of money. Pet. 7-24; *supra* pp. 17-25. Indeed, the Applicants circuitous attempt to explain why eliminating the $50 million contingency condition is irrelevant highlights that existence of an actual, material dispute of fact, which, as they know, cannot be resolved at the contention admissibility phase.[76]

B. The Commonwealth has Presented Adequate Factual Support and Expert Opinion to Raise a Genuine Dispute on Contention II.

NEPA, the Council on Environmental Quality's NEPA regulations, which are binding on the NRC, and longstanding precedent all make clear that NEPA establishes "'a set of action-forcing procedures' requiring federal agencies to take a 'hard look' at any *potential* environmental consequences associated with their '. . . actions' and to broadly disseminate

[75] This requirement flows directly from Atomic Energy Act (AEA), which dictates that decommissioning trust funds are the means by which the NRC complies with its obligation to ensure that a licensee has the financial means to decontaminate its site and "provide adequate protection to the health and safety of the public." 42 U.S.C. §§ 2201(x)(1), 2232(a).

[76] *See Pa'ina Hawaii, LLC*, 63 N.R.C. at 111. The Applicants, for example, make the circular and nonsensical argument that because the Commission must make a *future* determination that Holtec's has satisfied the NRC's financial assurance requirements the Commonwealth cannot *now* demonstrate the existence of a "material dispute with those assurances." Answer 53. If that were the rule, no party could ever demonstrate the existence of a material dispute, because the Commission's own authority as final arbiter would always displace a party's ability to do so.

relevant environmental information."[77] The corollary rule reinforces NEPA's scope: "[i]gnoring possible environmental consequences will not suffice."[78] Of course, as the Applicants suggest, federal agencies may properly find no significant impact exists where their assessment concludes that the probability of an impact "is so low as to be 'remote and speculative,'"[79] but the Applicants ignore the fact that first "an agency must look at both the probabilities of potentially harmful events and the consequences if those events come to pass" before making a finding of no significant impact.[80] At this point, the Commonwealth's Contention concerns the first step, and the legal obligation to undertake that consideration in this case, not the second step, which concerns what the NRC may conclude once it considers the potential environmental consequences of the proposed action.

NEPA also does not allow parties to isolate parts of a proposed action, as the Applicants try to do here, for purposes of considering whether an environmental assessment or environmental impact statement is required. Instead, "[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement." *See* 40 C.F.R. § 1502.4(a). In this case, as is made clear by the Commonwealth's Contention, Pet. 27 ¶ 32, the Applicants have proposed an action, i.e., the transfer and amendment of Pilgrim's license, that depends on and is influenced and informed by two other integrally related proposals: Holtec's Exemption Request and Holtec's PSDAR and

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[77] *Government of Province of Manitoba v. Zinke*, 849 F.3d 1111, 1115 (D.C. Cir. 2017) (emphasis added); *see also, e.g.*, *Nkihtaqmikon v. Impson*, 585 F.3d 495, 497 n.2 (1st Cir. 2009) ("NEPA requires federal agencies to assess the potential environmental consequences of actions that might detrimentally affect 'the quality of the human environment.").

[78] *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 157 (D.C. Cir. 1985).

[79] *New York v. Nuclear Regulatory Comm'n*, 681 F.3d 471, 478 (D.C. Cir. 2012).

[80] *Id.*

DCE.[81] Thus, to grant the requested action, the NRC must find that Holtec has demonstrated the financial ability to perform all of the described work. That determination turns on the activities in Holtec's PSDAR and DCE, whether Holtec has reasonably estimated what that work will cost, and whether there are adequate funds in the Trust Fund to cover all of those costs.

While the Commonwealth agrees, as a general matter, that where the only matter before the Commission is a PSDAR and DCE, the NRC has revised its regulations in an attempt to avoid triggering NEPA review. *See* Answer 59-60. Here, however, Holtec's PSDAR and DCE are not the only matters before the Commission; instead, they were submitted to support the Applicants' license transfer request and the Exemption Request. Nor, for that matter, does Holtec's PSDAR and DCE focus solely on decommissioning—they also cover site restoration and spent fuel management. *See supra* p. 1 n. 2. And contrary to the Applicants' argument, Answer 59-61, the Commonwealth is not challenging the NRC's regulations, but it is instead arguing that *in this case*, where the PSDAR and DCE are the foundation for the license transfer and amendment request and the Exemption Request, the PSDAR and DCE cannot be walled-off from NEPA review.

The Applicants do not dispute that a funding shortfall either during decommissioning or following decommissioning, when spent nuclear fuel will remain on site, could have potential adverse environmental, public health and safety, and economic consequences. Instead, the Applicants' efforts to show that Contention II is inadmissible rely largely on the same basic, yet flawed and conclusory assertions they use to contest Contention I: (1) the NRC's trust fund withdrawal oversight and ability to demand additional financial assurances in the future, and (2)

[81] In this case, the name Decommissioning Cost Estimate is a misnomer, because Holtec's cost estimate also covers site restoration and spent fuel management costs—activities that the Applicants concede do not constitute decommissioning activities. DCE at 8.

either separately or together, Holtec's purported ability to recover $500 million in spent fuel costs from DOE prove that there cannot be a funding shortfall. *E.g.*, Answer 54-58. These two flawed assertions, however, demonstrate the existence of a genuine dispute on a material issue, which requires an in-depth inquiry.[82] Neither of these assertions contravene the Commonwealth's contention.

NRC Financial Assurance Oversight

The Applicants' first point suffers from at least two fatal flaws. First, even assuming arguendo that the NRC's annual oversight will ensure adequate funds to decommission and restore the site, that process is aimed expressly at decommissioning, not ensuring adequate funds for spent fuel management and non-radiological remediation. 10 C.F.R. § 50.82(a)(8)(iv). In its Petition, the Commonwealth identified numerous additional, unaccounted for costs that if properly accounted for, would cause Holtec's DCE to exceed the amount available in the Trust Fund. Pet. 7-24. While some of those costs arise only if the spent fuel is not removed from the site by 2062, those costs, too, are relevant both for Contention I and Contention II. The Applicants' argument that Holtec need not account for those possible costs relies exclusively on the Commission's finding that it is reasonable to rely on Continued Storage Rule's finding that "the short-term period of storage is most likely."[83] Answer 46-47, 56. But, as described above, what the Applicants fail to note is that the "short-term period" analyzed in the Continued Storage Rule was sixty-years from the end of licensed operations[84]—a period that extends *seventeen*

[82] *Gulf States Utils. Co.,* 40 N.R.C. at 51.

[83] *Entergy Nuclear Vermont Yankee*, CLI-16-17, 2016 WL 8729987, at *12.

[84] I U.S. NRC, *Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel*, at App. B, at B-2 (NUREG-2157) (2014).

years beyond when Holtec estimates DOE will have removed all spent nuclear fuel from Pilgrim.[85]

Significantly, the Applicants also fail to note that this prior finding was made in the context of a request for an exemption to use Vermont Yankee's Trust Fund for spent fuel management costs, not in the context of NEPA, which requires the Commission to consider potential environmental consequences from possible outcomes.[86] While the Commonwealth does not agree that this finding was reasonable even in that context, it certainly is unreasonable in the NEPA context.[87] Indeed, even in *Entergy Nuclear Vermont Yankee,* CLI-16-17, the Commission acknowledged that the "the Continued Storage generic environmental impact statement acknowledges for purposes of NEPA that fuel could remain on site indefinitely," 2016 WL 8729987, at *12, and, significantly, the U.S. Court of Appeals for the D.C. Circuit previously held that the Commission's refusal to engage with the possible environmental

[85] DCE at 24.

[86] *See Entergy Nuclear Vermont Yankee*, CLI-16-17, 2016 WL 8729987, at *12. The Applicants also fail to note that the Commission's later Order approving the transfer of Vermont Yankee's license from Entergy to another party substantially repudiated this finding. There, unlike in *Entergy Nuclear Vermont Yankee*, CLI-16-17, 2016 WL 8729987, at *12, the Commission, after a more complete analysis, required substantial additional decommissioning and spent fuel management financial assurances as a condition of granting the license transfer request. Order Approving the Transfer of License and Conforming Amendment at 6-7, *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), Dkt. Nos. 50-271 & 72-59 (Oct. 11, 2018) (ADAMS Accession No. ML18248A096).

[87] The most current analysis of this issue also undermines the Applicants baseless optimism for early spent fuel removal. In September 2018, the Congressional Research Service, after carefully analyzing current efforts to fund and construct a federal repository, concluded that "longer on-site storage is almost a certainty." Congressional Research Service, *Civilian Nuclear Waste Disposal* 42 (2018).

consequences of indefinite spent fuel storage violated NEPA.[88] It would be equally unlawful to do so here.

The second fatal flaw in the Applicants' first point, *see supra* p. 36, is that the Applicants' claim that the NRC's ability to require additional financial assurance in the event of a future predicted or actual shortfall or to unilaterally adjust funding rings equally hollow. Contrary to the Applicants' argument, the Commonwealth is not "challenging the Commission regulations that take a year-by-year, real time approach to ensuring the adequacy of decommissioning funds," Answer 57. It is instead disputing the Commission's ability to secure additional funds from Holtec absent an actual regulatory commitment by Holtec to provide those funds if required and a concrete showing of how Holtec would fulfill that commitment if called upon to do so. Holtec, however, has steadfastly and carefully avoided making such commitments in the LTA, the Exemption Request, the PSDAR and DCE, or in its Answer to the Commonwealth's Petition. Holtec's obfuscation on this issue is telling and Holtec cannot therefore rely on the NRC's ability to require additional financial assurance to contravene the Commonwealth's showing on this issue. Holtec responds by pointing out that limited liability companies are common, Answer 49, but that is beside the point. The point, again, is that Holtec itself will enjoy *no* source of revenue to compensate for any shortfall, Holtec has made no regulatory commitment to use another source of funds (or a parental guarantee), and its status as a limited liability company will make it extremely difficult, if not impossible, to reach beyond it to a parent entity to secure additional funding in the event of a shortfall—an extremely concerning circumstance in the context of nuclear power plant decommissioning and potentially indefinite onsite management of spent nuclear fuel.

[88] *New York*, 681 F.3d at 478-79.

Possible Holtec Recovery of Spent Fuel Management Costs

The Applicants' second point—Holtec's purported ability to recover $500 million in spent fuel costs from DOE—fares no better than its first one. Stated simply, without a clear regulatory commitment by Holtec to use spent fuel costs recovered from DOE, there is a significant risk that Holtec will not have the funds necessary to decommission the facility, restore the site, and safely manage spent nuclear fuel. Answer 56-57; *see also id.* at 24, 34. For that reason, what the Commonwealth said in its Petition remains true: Holtec has failed to "commit to placing the funds it recovers . . . from DOE back into the Decommissioning Trust Fund . . . or even to make all of those funds available to cover a potential shortfall in the . . . Trust Fund prior to license termination." Pet. 26; *see also id.* at 2 n.3, 36.

The Applicants also ignore the fact that the NRC generally does not allow licensees to rely on potential DOE litigation-based recoveries to satisfy the NRC's financial assurance requirements, because those recoveries are not guaranteed.[89] In the recent Vermont Yankee license transfer proceeding, for example, the Commission refused to credit the proposed licensees' possible litigation-based recoveries from DOE.[90] While the Commission agreed to consider those recoveries if they were paid under the more certain circumstance of a settlement agreement, even then, the NRC required the licensee to "obtain a[n] [annual] performance bond"

[89] *Cf.* 10 C.F.R. § 50.75(e)(iii)(A) (chosen method of financial assurance must "guarantee that decommissioning costs will be paid"). For its part, Entergy has itself previously acknowledged that it "understands the NRC Staff's position" that such assumptions are not recognized as financial assurance." Entergy, *Response to NRC's Request for Additional Information to Support the Review of the Vermont Yankee Nuclear Power Station Update to VY Spent Fuel Management Plan (TAC No. ME1 152), dated May 20, 2009*, BVY 09-048 (Aug. 18, 2009) (ADAMS Accession No. ML092370298).

[90] Order Approving the Transfer of License and Conforming Amendment at 6-7, *In re Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), Dkt. Nos. 50-271 & 72-59 (Oct. 11, 2018) (ADAMS Accession No. ML18248A096).

if a settlement agreement was not finalized by a certain date.[91] The Commission, supported by NRC Staff's analysis, imposed that condition even though the licensee there had "committed to limiting any access to" the Trust Fund for spent fuel costs "to $20 million on a 'revolving' basis *and* to return [DOE] recoveries . . . to the trust fund."[92] In this case, of course, Holtec proposes to draw *$500 million* from the Trust Fund and has refused to commit to even holding a single penny of any DOE recovery for use at Pilgrim.

Generic Environmental Impact Statement Relevance to Proposed Action

The Applicants also fail to seriously dispute the Commonwealth's argument that the NRC has not previously considered the potential environmental consequences of the unique action pending before the Commission—a request to transfer a license to a new entity for purposes of decommissioning, site restoration, and long-term spent fuel management *and* a request for an unconditioned exemption to use the Trust Fund to cover all of those costs. To be sure, the NRC considered the potential environmental consequences of activities associated with decommissioning a nuclear power plant in its *Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities* (NUREG-0586) (Supp. 1 2002) (ADAMS Accession No. ML023470304). But, as the Applicants' largely acknowledge, Answer 63, that Generic Environmental Impact Statement (GEIS) did not consider the potential environmental consequences of non-decommissioning activities, such as spent fuel management, or of the potential environmental consequences of withdrawing money from a decommissioning trust fund to pay for spent fuel or non-radiological cleanup costs. *Id.* at 1-5 to 1-6, 4-12; *see also Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities* at App. O, at 101

[91] *Id.*

[92] *NRC Staff Safety Evaluation, Vermont Yankee* at 11.

(NUREG-0586) (Supp. 1 2002) (ADAMS Accession No. ML023500211). Similarly, as the Applicants note, Answer 63, the NRC considered the potential environmental consequences of continued onsite storage of spent nuclear fuel in the GEIS for the Continued Storage Rule.[93] But that GEIS did not clearly consider the potential environmental consequences of a funding shortfall or how to prioritize funding where there is only one committed funding source for decommissioning, site restoration, and spent fuel management with no other available or committed source of money.[94] It simply cannot be the case that the current, segmented approach to considering the potential environmental consequences of the proposed action—a categorical exclusion for the license transfer application and amendment, a proposed Environmental Assessment for the Exemption Request, and a bounding-analysis for the PSDAR and DCE—is lawful under NEPA. Indeed, it does not even make sense.

Climate Change Relevance to Proposed Action

Finally, the Applicants misunderstand the Commonwealth's argument regarding climate change, stating that "the Commonwealth's climate-change allegations *appear* to be focused on how the environment might impact the site." Answer 61 (emphasis added). But, in fact, the Commonwealth's point relates to how the increasingly frequent and devastating impacts of climate change "will impact site decommissioning, site restoration, and spent fuel management *activities*" at Pilgrim—a facility, sitting directly on the coast, that will enjoy no buffer from those increasingly severe impacts. Pet. 38 ¶ 52 (emphasis added). In other words, the Commonwealth's argument focuses on how the existing environmental risks posed by those activities will be exacerbated by climate change impacts either directly through increased runoff

[93] *Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel* § 4.18 (NUREG-2157) (2014).

[94] *See generally id.*

and erosion caused by the increasingly intense rainstorms and coastal flooding across the northeast, for example, or indirectly through work delays that increase the risk of a funding shortfall for decommissioning, site restoration, or spent fuel management, for example. While the Commonwealth acknowledges that completing the decommissioning and site restoration work on an accelerated basis may mitigate those risks to a certain degree, that does not alter the fact that the 2002 Decommissioning GEIS does not address those risks at all, *see generally* 2002 GEIS § 4.0, and the 2013 GEIS for License Renewal of Nuclear Plants. The GEIS considers climate change, but not in the context of decommissioning and site restoration. Pet. 40 (citing I NRC, *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (NUREG-1437) (Rev. 1 2013) (ADAMS Accession No. ML13106A241)). Those key points remain undisputed, and a hearing on this Contention is required for all of the reasons noted here and the additional ones noted in its Petition.

CONCLUSION

For these reasons, the Board should grant the Commonwealth's petition to intervene and the Commonwealth's associated hearing request.

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Respectfully submitted,

COMMONWEALTH OF MASSACHUSETTS

By their attorneys,

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
ENTERGY NUCLEAR OPERATIONS, INC.,	)	
ENTERGY NUCLEAR GENERATION	)	
COMPANY, AND HOLTEC	)	
DECOMMISSIONING INTERNATIONAL,	)	Docket Nos. 50-293 & 72-1044
LLC; CONSIDERATION OF APPROVAL OF	)	
TRANSFER OF LICENSE AND	)	
CONFORMING AMENDMENT	)	
	)	
(Pilgrim Nuclear Power Station)	)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I certify that copies of the Commonwealth of Massachusetts's Petition for Leave to Intervene and Hearing Request and the Five attached Declarations have been served upon the Electronic Information Exchange, the NRC's e-filing system, in the above-captioned proceeding this 1st day of April, 2019.

Signed (electronically) by
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Dated: April 1, 2019