UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of:)
	Docket Nos. 50-003-LT,
ENTERGY NUCLEAR OPERATIONS, INC.,	50-247-LT,
ENTERGY NUCLEAR INDIAN POINT 2, LLC,	50-286-LT, and
ENTERGY NUCLEAR INDIAN POINT 3, LLC,	72-051-LT-2
HOLTEC INTERNATIONAL, and HOLTEC	
DECOMMISSIONING INTERNATIONAL, LLC	
	March 9, 2020
(Indian Point Nuclear Generating Unit Nos. 1, 2, and 3)	

APPLICANTS' ANSWER OPPOSING PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST FILED BY THE TOWN OF CORTLANDT, VILLAGE OF BUCHANAN, AND HENDRICK HUDSON SCHOOL DISTRICT

John E. Matthews Esq.

John E. Matthews, Esq.
Paul M. Bessette, Esq.
Ryan K. Lighty, Esq.
Scott D. Clausen, Esq.
Morgan, Lewis & Bockius LLP

William Gill, Esq.	Susan H. Raimo, Esq.
HOLTEC INTERNATIONAL	William B. Glew, Jr., Esq.
	ENTERGY SERVICES LLC

Counsel for Holtec International and
Holtec Decommissioning International, LLC
Entergy Nuclear Indian Point 2, LLC, and
Entergy Nuclear Indian Point 3, LLC

TABLE OF CONTENTS

				Page
I.	INTF	RODUC	CTION	1
II.	BAC	KGRO	UND	5
III.			CONTENTION 1 (FINANCIAL ASSURANCE) IS IBLE	6
	A.	The	Regulations Relied On By Petitioners Do Not Raise An Issue Within Scope Of This Proceeding And Do Not Raise A Genuine Dispute The Application	8
	B.	Basis	s A (Cost Overruns) Is Inadmissible	9
		1.	HDI's Assumption That DOE Will Accept SNF By 2030 Is Reasonable And Reasonably Accounts For The Most Current DOE Guidance	10
		2.	HDI's Cost Estimate Accounts For Unanticipated Costs	17
		3.	Petitioners Fail To Support Their Claim That HDI's Contingency Allowance Is Insufficient	26
	C.	Basis	s B (Financial Assurance) Is Inadmissible	28
		1.	Holtec's Corporate Structure Is Immaterial, Unsupported, And Does Not Raise A Genuine Dispute With The Application	29
		2.	Petitioners' May Rely Solely On The NDTs To Show Adequate Financial Assurance	30
		3.	Holtec And Its Joint Venture Partner Have Significant Decommissioning Experience	32
		4.	Petitioners Claim That HDI Did Not Meet NRC Regulatory Requirements is Unsupported	33
	D.	Basis	s C (Exemption Request) Is Inadmissible	34
	E.	Petit	ioners' Proposed License Conditions Are Out-Of-Scope	34
IV.	PRO	POSED	CONTENTION 2 (NEPA REVIEW) IS INADMISSIBLE	36
	A.	_	osed Contention 2 Is An Impermissible Challenge To The NRC's gorical Exclusion Rule	38
	B.	No "Special Circumstances" Exist To Exempt The Application From The Categorical Exclusion Rule		
	C.	Envi Unsi	ioners' Out-Of-Scope Challenges Regarding The Alleged ronmental Impacts Of The PSDAR And Exemption Request Are apported, Immaterial, And Fail To Raise A Genuine Dispute With The lication	42
V.	CON	Appi CLUSI		44

TABLE OF AUTHORITIES

	Page(s)
NRC Cases	
Consol. Edison Co. of N.Y. (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109 (2001)	35
Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328 (1999)	7
Energy Solutions, LLC (Radioactive Waste Import/Export Licenses), CLI-11-3, 73 NRC 613 (2011)	40
Entergy Nuclear Vt. Yankee LLC (Vt. Yankee Nuclear Power Station), LBP-15-24, 82 NRC 68 (2015)	3, 24, 25
Entergy Nuclear Vt. Yankee, LLC (Vt. Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99 (2016)	passim
Entergy Nuclear Vt. Yankee, LLC (Vt. Yankee Nuclear Power Station), CLI-16-8, 93 NRC 463 (2016)	3
Exelon Generation Co. (Oyster Creek Nuclear Generating Station), CLI-19-06, 90 NRC (2019) (slip op.)	30
N. Atl. Energy Serv. Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201 (1999)	7, 13
Statutes	
42 U.S.C. § 2232	4, 6
NRC Regulations	
10 C.F.R. § 2.304	5
10 C.F.R. § 2.309	passim
10 C.F.R. § 2.314	5
10 C.F.R. § 2.335	40
10 C.F.R. § 50.33	31, 33
10 C.F.R. § 50.75	passim
10 C.F.R. § 50.80	
10 C.F.R. § 50.82	
10 C.F.R. § 51.22	

TABLE OF AUTHORITIES

	Page(s)
10 C.F.R. § 51.53	37
Federal Register Publications	
Decommissioning of Nuclear Power Reactors, 61 Fed. Reg. 39,278 (July 29, 1996)	3
Entergy Nuclear Operations Inc; Pilgrim Nuclear Power Station, 84 Fed. Reg. 43,186 (Aug. 20, 2019)	38
Indian Point Nuclear Generating Unit Nos. 1, 2, and 3; Consideration of Approval of Transfer of Control of Licenses and Conforming Amendments, 85 Fed. Reg. 3,947 (Jan. 23, 2020)	6
Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,168 (1989)	7
Streamlined Hearing Process for NRC Approval of License Transfers, 63 Fed. Reg. 66,721 (Dec. 3, 1998)	39
Other Authorities	
Nuclear Energy Institute, NEI 07-07, Industry Ground Water Protection Initiative – Final Guidance Document (Aug. 2007)	20, 25
NUREG-1437, Supplement 38, Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 (June 2012)	43
NUREG-1575, Rev. 1, Multi-Agency Radiation Survey and Site Investigation Manual (Aug. 2000)	21
NUREG-1713, Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors (Dec. 2004)	24
NUREG-2157, Vol. 1, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (Sept. 2014)	12, 13, 16
Regulatory Guide 1.202, Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors (Feb. 2005)	26
Regulatory. Guide 1.185, Rev. 1, Standard Format and Content for Post-Shutdown Decommissioning Activities Report (June 2013)	26, 44

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of:)	
)	Docket Nos. 50-003-LT,
ENTERGY NUCLEAR OPERATIONS, INC.,)	50-247-LT,
ENTERGY NUCLEAR INDIAN POINT 2, LLC,)	50-286-LT, and
ENTERGY NUCLEAR INDIAN POINT 3, LLC,)	72-051-LT-2
HOLTEC INTERNATIONAL, and HOLTEC)	
DECOMMISSIONING INTERNATIONAL, LLC)	
)	March 9, 2020
(Indian Point Nuclear Generating Unit Nos. 1, 2, and 3))	
	_)	

APPLICANTS' ANSWER OPPOSING PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST FILED BY THE TOWN OF CORTLANDT, VILLAGE OF BUCHANAN, AND HENDRICK HUDSON SCHOOL DISTRICT

I. <u>INTRODUCTION</u>

Pursuant to 10 C.F.R. § 2.309(i)(1), Entergy Nuclear Operations, Inc. ("ENOI"), Entergy Nuclear Indian Point 2, LLC ("ENIP2"), Entergy Nuclear Indian Point 3, LLC ("ENIP3"), Holtec International ("Holtec"), and Holtec Decommissioning International, LLC ("HDI") (together, the "Applicants"), submit this Answer opposing the Petition for Leave to Intervene and Hearing Request ("Petition") filed by the Town of Cortlandt, Village of Buchanan, and Hendrick Hudson School District (together, "Petitioners") on February 12, 2020. Petitioners seek to intervene in the proceeding associated with the Applicants' November 21, 2019, license transfer application ("LTA" or "Application").

Town of Cortlandt, Village of Buchanan, and Hendrick Hudson School District's Petition for Leave to Intervene and Hearing Request (Feb. 12, 2020) (ML20043F054) ("Petition").

See Letter from A. Christopher Bakken III, Entergy, to NRC Document Control Desk, "Application for Order Consenting to Transfers of Control of Licenses and Approving Conforming License Amendments, Indian Point Nuclear Generating Unit 1, 2, and 3" (Nov. 21, 2019) (ML19326B953) ("LTA").

In the LTA, Applicants requested that the U.S. Nuclear Regulatory Commission ("NRC") approve the transfer of control of Provisional Operating License No. DPR-5 and Renewed Facility Operating License Nos. DPR-26 and DPR-64 for Indian Point Nuclear Generating Unit Nos. 1, 2, and 3, respectively (referred to individually as "IP1," "IP2," or "IP3," and collectively as "Indian Point" or "IPEC"), as well as the general license for the IPEC Independent Spent Fuel Storage Installation ("ISFSI") (collectively, the "Licenses"). The LTA requests that the NRC consent to: (1) the transfer of control of the Licenses to Holtec subsidiaries to be known as Holtec Indian Point 2, LLC ("Holtec IP2") and Holtec Indian Point 3, LLC ("Holtec IP3") and (2) the transfer of ENOI's operating authority to HDI. The LTA also requests that the NRC approve conforming administrative amendments to the Licenses to reflect the proposed transfer. Approval of these transfers is sought to effectuate a transaction described in the Membership Interest Purchase and Sale Agreement ("MIPA") attached to the LTA.³ Subject to the satisfaction of all closing conditions, including receipt of all required regulatory approvals, the Applicants are targeting a transaction closing in May 2021, after all units have been permanently shut down and defueled.

As explained in Applicants' Answer to the hearing request filed by the State of New York, which Applicants incorporate by reference here, HDI is a special purpose entity formed by Holtec to decommission nuclear power plants (including IPEC).⁴ HDI chose to decommission IPEC using the DECON method. Accordingly, HDI submitted a DECON Post-Shutdown Decommissioning Activities Report ("PSDAR"), including a Site-Specific Decommissioning Cost Estimate ("DCE"),

³ LTA, Encl. 1, Attach. B (Non-Proprietary MIPA); LTA, Encl. 1P (Proprietary MIPA).

⁴ Applicants' Answer Opposing Petition for Leave to Intervene and Hearing Request Filed by the State of New York, Part I (Mar. 9, 2020) ("Ans. to NY") (discussing HDI and the contracts HDI is expected to enter into to decommission IPEC, the possible decommissioning strategies, and HDI's choice of the DECOM decommissioning strategy).

reflecting its decommissioning plans following the proposed transfers of the Licenses.⁵ HDI also submitted a separate Exemption Request seeking NRC approval for HDI to use of a portion of the IPEC Nuclear Decommissioning Trust ("NDT") funds for spent fuel management and site restoration activities.⁶

As an initial matter, Petitioners state that they are seeking a hearing on not just the LTA, but also on the PSDAR, and the Exemption Request.⁷ Neither the PSDAR nor the Exemption Request, however, are subject to a hearing. As a general matter, although NRC rules require the submission of a PSDAR, which serves to inform the public and NRC Staff of the licensee's proposed activities, approval is not required under the NRC rules.⁸ Because the NRC does not approve the PSDAR, the Commission has held that it "does not give rise to a hearing opportunity." And although the Exemption Request requires NRC approval, the Commission has held that "exemption requests are not subject to a hearing opportunity under the [Atomic Energy Act]." ¹⁰

That the PSDAR and Exemption Request are outside the scope of this hearing was established in the Vermont Yankee license amendment proceeding. There, Vermont sought to challenge a license amendment request by raising issues tied to Entergy's PSDAR and its

⁻

See Letter from A. Sterdis, HDI, to NRC Document Control Desk, "Post Shutdown Decommissioning Activities Report including Site-Specific Decommissioning Cost Estimate for Indian Point Nuclear Generating Units 1, 2, and 3" (Dec. 19, 2019) (ML19354A698) (the PSDAR is an enclosure to this letter and the DCE is Encl. 1 to the PSDAR).

See Letter from A. Sterdis, HDI, to NRC Document Control Desk, "Request for Exemptions from 10 CFR 50.82 (a)(8)(i)(A) and 10 CFR 50.75 (h)(1)(iv)" (Feb. 12, 2020) (ML20043C539) ("Exemption Request").

⁷ Petition at 3-4.

Decommissioning of Nuclear Power Reactors, 61 Fed. Reg. 39,278, 39,281 (July 29, 1996) (codified at 10 C.F.R. pts. 2, 50 & 51) ("1996 Decommissioning Rule"). In establishing the current process governing decommissioning, the NRC "eliminate[d] the need for an approved decommissioning plan before major decommissioning activities can be performed." *Id.*

Entergy Nuclear Vt. Yankee, LLC (Vt. Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99, 104 & n.7 (2016) (noting that the hearing opportunity arises when the licensee submits an amendment request to terminate its license); see also Entergy Nuclear Vt. Yankee LLC (Vt. Yankee Nuclear Power Station), LBP-15-24, 82 NRC 68, 84 (2015) vacated as moot, CLI-16-8, 93 NRC 463 (June 2, 2016).

¹⁰ Vt. Yankee, CLI-16-17, 84 NRC at 115; Vt. Yankee, LBP-15-24, 82 NRC at 84.

exemption request to use Vermont Yankee NDT funds for certain spent fuel management costs.¹¹ The Commission ruled that neither the PSDAR nor the exemption request gave rise to a hearing opportunity.¹² Thus, Commission precedent clearly holds that Petitioners cannot challenge the PSDAR or the Exemption Request in this proceeding.

Petitioners have proposed two contentions. Proposed Contention 1 claims that the Applicants failed to provide sufficient evidence to show that there will be reasonable assurance of adequate protections for public health and safety as required by 42 U.S.C. § 2232(a). Proposed Contention 1 includes three sub-contentions: (1) that HDI's PSDAR contains several unreasonable assumptions that could lead to cost overruns that would deplete the NDT funds, (2) that Holtec's corporate structure and lack of assets and revenue make Holtec financially unfit to decommission Indian Point, and (3) the license transfer, "forthcoming exemption request," and PSDAR incentivize Holtec to cut corners resulting in significant public health, safety, and environmental risks. Holtec to cut corners resulting in citation did not include the environmental review required by the National Environmental Policy Act and NRC regulations. As discussed below, neither contention is admissible.

Although not included in their two proposed contentions, or alleged as a separate contention,

Petitioners mention several other concerns they have about the decommissioning of Indian Point.

These concerns are the loss of tax revenue following the closure of IPEC and the impact that a less

As explained in the Commission's decision, Vermont sought a hearing on Entergy's license amendment request, which the ASLB granted. Entergy then moved to withdraw its license amendment request and terminate the proceeding, which the ASLB granted, but it also imposed certain restrictions on Entergy. Vermont then filed a petition with the Commission, which the Commission granted as a discretionary exercise of its inherent supervisory authority over agency proceedings. *Vt. Yankee*, CLI-16-17, 84 NRC at 106-09.

¹² *Id.* at 103, 114, and 116.

Petition at 10.

¹⁴ *Id.* at 11, 22, and 28.

¹⁵ *Id.* at 32.

than fully decommissioned site would have on local property taxes and the potential economic redevelopment of the site.¹⁶ While Applicants are aware of the impact Indian Point's closure will have on local communities and their tax base, these issues are beyond the NRC's jurisdiction, and thus, they are outside the scope of this proceeding.¹⁷ Petitioners also state that they have a "substantial interest in a prompt, safe, and complete decommissioning of the IPEC."¹⁸ Applicants fully share this goal.

As to Petitioners' two proposed contentions, however, neither of the two proposed contentions satisfies the six admissibility criteria in 10 C.F.R. § 2.309(f)(1). Proposed Contention 1 raises issues that are not material and outside the scope of this proceeding, unsupported by fact or law, and fails to dispute the actual content of the Application. Proposed Contention 2 raises issues outside the scope of this proceeding, is unsupported by fact or law, and fails to dispute the actual content of the Application. For these and the reasons set forth below, the Commission must deny the Petition in its entirety for failing to proffer an admissible contention.¹⁹

II. BACKGROUND

Applicants filed the LTA on November 21, 2019.²⁰ On January 23, 2020, the NRC published a notice in the *Federal Register* informing the public that it is considering the LTA for approval, providing an opportunity for the public to submit written comments on the LTA, and offering an opportunity for persons whose interests may be affected by approval of the LTA to file

¹⁶ *Id.* at 2.

¹⁷ See discussion infra Section III.E.

Petition at 3.

Petitioners' counsel also failed to comply with the requirements of 10 C.F.R. § 2.314(b), which specifies that "[a]ny person appearing in a representative capacity shall file with the Commission a written notice of appearance." Likewise, the Petition fails to comply with the requirements in 10 C.F.R. § 2.304(d)(1)(ii) regarding "on brief" signatories other than the digital e-filer.

²⁰ LTA, Transmittal Letter at 1-2.

(within 20 days of the notice) hearing requests and intervention petitions.²¹ Petitioners timely filed their Petition on February 12, 2020. Applicants timely file this Answer opposing the Petition in accordance with the provisions of 10 C.F.R. § 2.309(i)(1).

A full analysis of the legal and regulatory framework related to decommissioning, spent nuclear fuel management, reactor license transfers, and contention admissibility is presented in Applicants' answer to the hearing request filed by the State of New York.²² For the sake of brevity, rather than republishing the discussion in full, Applicants incorporate it here by reference. In summary, to be granted a hearing, a petitioner must propose at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f).²³ Because Petitioners have not done so here, their Petition must be denied.

III. PROPOSED CONTENTION 1 (FINANCIAL ASSURANCE) IS INADMISSIBLE

In Proposed Contention 1, Petitioners claim that the Applicants have failed to show that Holtec possesses adequate financial assurances to protect public health and safety. Specifically, Petitioners allege:

The Applicants failed to provide sufficient evidence to demonstrate that, if the Application is approved, there will be a reasonable assurance of adequate protection for public health and safety, as required by 42 U.S.C. § 2232(a).²⁴

In particular, Petitioners allege that the "License Transfer Application, Forthcoming Exemption Request, and PSDAR do not demonstrate that Holtec possesses the necessary technical and financial qualifications to ensure 'adequate protection to the health and safety of the public,' as

Indian Point Nuclear Generating Unit Nos. 1, 2, and 3; Consideration of Approval of Transfer of Control of Licenses and Conforming Amendments, 85 Fed. Reg. 3,947 (Jan. 23, 2020) ("Hearing Notice").

²² Ans. to NY Part III.

²³ 10 C.F.R. § 2.309(a).

Petition at 10.

required by the Atomic Energy Act," and 10 C.F.R. §§ 50.82(a)(8)(i)(B) and (C) and 50.75(h)(1)(iv).²⁵ Petitioners then set forth three bases or sub-contentions in their proposed contention that Petitioners argue provide the basis for an admissible contention. Petitioners also propose two license conditions should the Commission grant the Application.²⁶

As discussed in the Applicants' Answer to the hearing request filed by the State of New York, and incorporated here by reference, there are multiple layers of protection against potential negative impacts to the NDTs from potential unexpected costs.²⁷ The NRC recognizes that cost estimates are just that—*estimates*—and the NRC imposes a *lower* standard of "reasonable assurance" on cost predictions.²⁸ In the context of contention admissibility, this means that allegations of underestimated costs must demonstrate (with adequate support) two things: (1) that the cost estimate is premised on entirely *implausible* assumptions; AND (2) that the postulated underestimation will defeat *all* the layers of NDT protection.²⁹ The second demonstration is required because, without it, there would be no material impact on the NDT.³⁰

Individually and collectively, Petitioners' Bases A through C fail to show (with adequate support) *either* that the DCE is premised on entirely implausible assumptions *or* that the speculative underestimations postulated by Petitioners will defeat *all* layers of NDT protection. Petitioners certainly do not demonstrate both. For these reasons, and as discussed below, none of these

_

Id. at 10-11. Applicants note that HDI filed what Petitioners call the "Forthcoming Exemption Request" on February 12, 2020, the same day Petitioners filed their Petition. See Exemption Request.

²⁶ Petition at 30-32.

²⁷ Ans. to NY Part V (p. 22-25).

²⁸ Id.; N. Atl. Energy Serv. Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 221-22 (1999).

²⁹ Id

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (quoting Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,168, 33,172 (1989) (To be material, a contention must raise an issue that could "make a difference in the outcome of the licensing proceeding.")).

sub-contentions identifies an admissible basis for a contention, and thus, Proposed Contention 1 fails to satisfy the Commission's contention admissibility criteria in 10 C.F.R. § 2.309(f)(1).

A. The Regulations Relied On By Petitioners Do Not Raise An Issue Within The Scope Of This Proceeding And Do Not Raise A Genuine Dispute With The Application

As an initial matter, Petitioners' claim that the LTA, PSDAR, and Exemption Request do not meet the technical and financial assurance requirements of 10 C.F.R. §§ 50.82(a)(8)(i)(B) and (C) and 50.75(h)(1)(iv). Petitioners' reliance on these two regulations is misplaced, because they do not require a showing of technical or financial qualifications. Instead, these two provisions deal with disbursements from the NDTs. Petitioners' claim is thus outside the scope of this proceeding because the Application is seeking a license transfer, not disbursements from the NDTs.

Section 50.82(a)(8)(i)(B) and (C) states that:

(8)(i) Decommissioning trust funds may be used by the licensees if—

* * *

- (B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise and;
- (C) The withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.³¹

Section 50.75(h)(1)(iv) states that:

(h)(1) Licensees that are not "electric utilities" as defined in § 50.2 that use prepayment or an external sinking fund to provide financial assurance shall provide in the terms of the arrangements governing the trust, escrow account, or Government fund, used to segregate and manage the funds that—

³¹ 10 C.F.R. § 50.82(a)(8)(i).

* * *

(iv) Except for withdrawals being made under § 50.82(a)(8) or for payments of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, no disbursement or payment may be made from the trust, . . . until written notice of the intention to make a disbursement or payment has been given to the Director, Office of Nuclear Reactor Regulation, or Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the date of the intended disbursement or payment. . . . Disbursements or payments from the trust . . . are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After withdrawals decommissioning has begun and decommissioning fund are made under § 50.82(a)(8), no further notification need be made to the NRC.³²

Applicants, as discussed below, understand the NRC's comprehensive and rigorous regulatory oversight of NDT funds and disbursements, of which these two regulatory provisions are a part. But nowhere does either of these two provisions—cited by Petitioners—require a showing of "technical or financial qualifications." Petitioners do not explain why they believe these two provisions require such a showing, and because these two provisions only address withdrawals from the NDTs, they are outside the scope of this license transfer proceeding and do not show a genuine dispute with the Application.

B. Basis A (Cost Overruns) Is Inadmissible

In Basis A, Petitioners claim that HDI's PSDAR and DCE contain several unreasonable assumptions, and that cost overruns associated with these assumptions could deplete the NDTs before decommissioning is finished. Specifically, Petitioners claim

³² 10 C.F.R. § 50.75(h)(1)(iv).

³³ See 10 C.F.R. §§ 50.75(h)(1)(iv), 50.82(a)(8)(i)(B), (C).

The Applicants PSDAR contains several untenable assumptions, any of which could result in cost overruns that drain the decommissioning trust fund.³⁴

Petitioners identify three specific assumptions or deficiencies in the DCE that they believe are unreasonable: (1) Holtec assumed that the U.S. Department of Energy ("DOE") will accept spent nuclear fuel in 2030; (2) Holtec failed to account for unanticipated costs caused by additional and unknown radiological and non-radiological contamination; and (3) Holtec's contingency allowance in the DCE is inadequate to cover these unanticipated costs.³⁵ Petitioners claim that these unreasonable assumptions or deficiencies could lead to cost overruns (*i.e.*, above the estimated costs in the DCE) that deplete the NDTs before decommissioning work is complete. As discussed below, Basis A does not raise a material issue, is speculative and unsupported by facts or expert opinions, and does not raise a genuine issue with the application. For these reasons, Basis A does not supply an admissible basis for Proposed Contention 1.

1. <u>HDI's Assumption That DOE Will Accept SNF By 2030 Is Reasonable And Reasonably Accounts For The Most Current DOE Guidance</u>

Petitioners claim that HDI's DCE "rests in large part on a single assumption: that the DOE will begin accepting [SNF] by 2030."³⁶ According to Petitioners, HDI's assumption has "no evidentiary support," and the assumption does not withstand "the slightest scrutiny."³⁷ Petitioners also claim that HDI could incur "significant and ongoing cost overruns for spent fuel management" that could "bankrupt the [NDTs]."³⁸ According to Petitioners, HDI's failure to provide an "alternate decommissioning cost estimate[] based on different timelines for DOE's acceptance of

.

Petition at 11.

³⁵ *Id.* at 12, 16, and 21.

³⁶ *Id.* at 12.

³⁷ *Id*.

³⁸ *Id.* at 15.

[SNF] renders the Application[] facially incomplete."³⁹ But Petitioners' claim related to the timeline for DOE's acceptance of SNF is factually inaccurate as reflected by their own pleading, speculative and unsupported, and does not raise a genuine dispute with the Application.

a. The DCE Reasonably Relies on the Most Recent DOE Guidance

Petitioners allege that HDI's assumption in the DCE that DOE will begin accepting SNF in 2030 has "no evidentiary support." But in the following paragraph, Petitioners acknowledge the exact basis HDI used, noting HDI "identified DOE's 2013 report, 'Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste'" as "justification for this assumption." And HDI's DCE is clear that its use of the 2030 date reflects DOE's 2013 policy:

In January 2013, the DOE issued the "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste" (Reference 10), indicating plans to implement a program over the next 10 years that begins operations of a pilot interim storage facility by 2021 with an initial focus of accepting used nuclear fuel from shutdown reactor sites with a larger interim storage facility to be available by 2025. Although the DOE proposed it would start fuel acceptance in 2025, no progress has been made in the repository program since DOE's 2013 strategy was issued except for the completion of the Yucca Mountain safety evaluation report. Because of this continued delay, this DCE assumes a start date for DOE fuel acceptance of 2030.⁴²

While Petitioners may have their own opinions about future DOE performance, the fact is that DOE's 2013 policy document remains the most up-to-date guidance from the DOE about when and how it expects to begin accepting SNF. HDI's assumption also aligns with industry assumptions regarding DOE performance for decommissioning costs estimates, and these

⁴⁰ *Id.* at 12.

10. 00 12.

DCE at 64 (emphasis added).

³⁹ *Id.* at 16.

⁴¹ *Id.* at 12.

assumptions have been accepted by the NRC.⁴³ As a result, consistent with the assumptions of other nuclear facility operators, HDI's assumptions reasonably reflect the most current DOE strategy and acceptance rates, but also conservatively accounts for DOE's lack of performance to date. In contrast, Petitioners cite no more recent guidance from DOE regarding future performance or any more certain "evidence."

Instead, Petitioners cite the NRC's Continued Storage Rule ("CSR") and claim that the CSR acknowledges that SNF may be stored on-site for hundreds of years, if not indefinitely—the implication being that the NRC does not expect DOE to begin to remove SNF in 2030 or, maybe, ever. He are Petitioners' reliance on the CSR is misplaced. The CSR and the related Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157) ("CSR GEIS") do not establish a genuine dispute with the DCE for two reasons. First, neither the CSR nor the CSR GEIS makes any assumptions or statements on the DOE *start date*, but each focuses instead on assumptions of when *all* fuel would be removed from U.S. reactor sites. As Petitioners recognize, HDI does not assume DOE will remove all high-level waste from Indian Point until 2061—over forty years from now. This storage period generally aligns with the CSR GEIS. As the Commission has held, "with regard to the fuel-costs claim, while the [CSR GEIS]

See, e.g., Site-Specific Decommissioning Cost Estimate for Three Mile Island, Unit 1 at 13 (Apr. 5, 2019) (ML19095A010) (assuming DOE will being accepting SNF in 2030); Diablo Canyon Power Plant, Units 1 and 2, Site Specific Decommissioning Cost Estimate at 27 (Dec. 4, 2019) (ML19345D345) (assumes DOE will begin accepting SNF in 2031); Site-Specific Decommissioning Cost Estimate for the Crystal River Unit 3 Nuclear Generating Plant at xiv (Dec. 31, 2013) (ML13343A178) (assumes DOE will begin accepting SNF in 2032); Pilgrim Nuclear Power Station DECON Site-Specific Decommissioning Cost Estimate at 24 (Nov. 16, 2018) (ML18320A040) (assuming DOE will begin accepting SNF in 2030). See also, e.g., Safety Evaluation for Direct and Indirect Transfer of Renewed Facility Operating License to Holtec Pilgrim, LLC, Owner, and Holtec Decommissioning International, LLC, Operator at 13 (Aug. 22, 2019) (ML19170A250) ("HDI based its cost assumptions on fuel removal from Pilgrim in 2030 through 2062. The NRC staff accepts these assumptions with regard to the final disposition of Pilgrim spent fuel.").

Petition at 13.

⁴⁵ *Id*.

acknowledges for purposes of NEPA that fuel could remain on-site indefinitely, it finds the short-term period of storage most likely."⁴⁶

Second, and more importantly, the analysis of environmental impacts in the CSR GEIS, which bounds all scenarios to meet the requirements of NEPA, is separate from and not relevant to HDI's site-specific DCE and cash flow analysis necessary to determine whether HDI meets NRC's financial assurance requirements. So, while Petitioners may speculate that DOE may not begin removing SNF from Indian Point in 2030 nor complete removing all SNF from Indian Point by 2061, the NRC does not require absolute certainty in a licensee's financial projections. NRC instead requires only reasonable assurance "based on plausible assumptions and forecasts." 47

b. <u>Petitioners' Claim Is Unsupported by Facts or Expert Opinions</u>

Petitioners claim that HDI's assumption that DOE will begin accepting SNF in 2030 is unreasonable because DOE requires an act of Congress, and Congress "has appropriated no funding to restart the Yucca Mountain licensing process." But Petitioners offer no expert opinion or other supporting information to show that DOE cannot achieve its policy or that HDI's reliance on DOE's most recent pronouncements is unreasonable. And Petitioners have offered no expert opinion or declarations to support any part of their Petition.

Instead, Petitioners claim that their own simple calculations show that if DOE does not begin accepting SNF in 2030, then HDI would likely experience significant, ongoing cost overruns related to spent fuel management that "could easily bankrupt the [NDTs]." Petitioners then claim

Vt. Yankee, CLI-16-17, 84 NRC at 118 (citing NUREG-2157, Vol. 1, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel, app. B at B-2 (Sept. 2014) (ML14196A105) ("NUREG-2157")).

⁴⁷ Seabrook, CLI-99-6, 49 NRC at 221-22.

⁴⁸ Petition at 12-13.

See id. at 12-16. In addition, DOE's obligation to accept SNF is unconditional and not dependent on the existence of Yucca Mountain.

⁵⁰ *Id.* at 14.

that non-performance by DOE will result in \$18.5 million of additional spent fuel management costs annually.⁵¹ But, given the clear structure in HDI's submissions, Petitioners err by basing their calculation on the "average annual fuel management costs" from each unit's cash flow analysis.⁵² As shown below, the Petitioners' averaging approach leads to misleading results by including costs that do not reflect the impact of DOE non-performance.

HDI's cash flow analysis for each unit shows that spent fuel management costs *vary* during different activity periods, depending on the activities conducted during each period.⁵³ Averaging the total costs of all three periods, as Petitioners did, simply does not accurately reflect the potential costs to HDI should DOE fail to remove waste according to its own policy guidance. This is because the higher costs of the early years primarily reflect the cost to remove the fuel from the spent fuel pools and move it to the ISFSI. These costs will be incurred regardless of the timing of DOE's performance. Similarly, the substantial costs to package fuel on the ISFSI into DOE casks will only be incurred once DOE performs.

To illustrate Petitioners' error, Petitioners claim that the average cost of spent fuel management for all three units from 2021 to 2063 is "\$18.5 million per year." But when only the costs of the storage period between 2025 to approximately 2030 are considered (*i.e.*, excluding costs for moving SNF to the ISFSI after reactor shutdown), the average annual cost of spent fuel management for all three units is approximately \$5 million per year. And from 2030 until ISFSI decommissioning is complete, the average annual cost is no more than \$12.5 million per year for all

⁵¹ *Id*.

⁵² See id.

DCE at 100-05; see also PSDAR at 7-14 (discussing the different phases of decommissioning).

Petition at 14.

⁵⁵ DCE at 100-05.

three units.⁵⁶ Both figures are much less than the \$18.5 million that Petitioners calculated, and Petitioners' calculated costs of DOE non-performance are simply not accurate.⁵⁷

Besides the speculative cost of DOE non-performance, Petitioners also claim that Applicants omitted the cost of constructing a dry transfer system ("DTS") to either repackage SNF "into new dry casks every 100 years" or to repackage SNF for delivery to the DOE.⁵⁸ But this claim is also speculative and unsupported, and it disregards relevant information in the DCE.

By way of background, SNF is typically loaded into a canister in the plant's spent fuel pool. The canister is then dried, welded shut, and transferred (via a transfer cask) to a storage cask on the site's ISFSI. Historically, some canisters were *only* compatible with storage casks and could not be used in transportation casks. However, consistent with current industry practices, IPEC's dry storage system uses a *multi-purpose canister* ("MPC") suitable for storage, transportation, and disposal.⁵⁹ In other words, once the fuel assemblies are loaded into the MPC and welded shut, they do not have to be "repackaged" into a different *canister* before offsite transport. Rather, a transfer cask is used (a second time) to transfer the MPC out of its storage cask (at the ISFSI) and into a DOE-supplied transportation cask (for off-site transport). Because the Indian Point SNF is already in MPCs, a DTS to repackage it for transportation is not needed, and Petitioners offer no support to explain why re-canistering for transport is necessary.

Additionally, other than citing the Continued Storage Rule, Petitioners offer no other support for their claim that a DTS will be necessary to "move fuel into new dry casks every 100"

⁵⁶ Id

DCE at 100-05. Further, assumed delayed DOE performance would presumably result in delayed loading costs to DOE, which would offset a presumed increase in additional SNF management costs.

Petition at 14.

⁵⁹ *See* DCE at 65.

years."60 The CSR GEIS, however, only assumes that repackaging requiring the use of a DTS will occur during the "long-term and indefinite storage timeframes," that is, the term of storage beginning "160 years beyond the licensed life for operation of the reactor." This places the time for constructing a DTS at Indian Point around 2181, or 160 years after permanent shutdown. Even if DOE's performance is delayed for 100 years, i.e., to 2130, the CSR GEIS does not assume a DTS will be needed. Petitioners' reliance on the CSR is thus misplaced, and Petitioners offer no other support to explain why re-canistering would be required at IPEC.

But importantly, even if there is a delay in DOE performance, any additional spent fuel management costs incurred would be expected to be recoverable from the DOE and available to provide additional financial assurance, if needed. These potential future recoveries from DOE also show there is no factual basis for Petitioners claims that either they or New York State will somehow have to shoulder future spent fuel management costs. 62

Petitioners Fail to Raise A Material Issue c.

Although Petitioners' concern about cost overruns caused by spent fuel management costs is unsupported, it is also not material because the Commission's regulations provide for Commission oversight of the NDTs during decommissioning, with a mechanism to demand more funding or assurance if needed. 63 And NRC certainly has sufficient time to address such an issue, given that the DCE fully accounts for spent fuel management costs through 2061. Petitioners have cited

See 10 C.F.R. § 50.82(a)(8).

Petition at 14. To the extent that this argument could be read to suggest that IPEC's MPCs will be incompatible with the transportation casks ultimately selected by DOE (thus requiring re-canistering), it is purely speculative. DOE has not yet identified any specific transportation casks that will be used. For the sake of argument, even in a speculative scenario in which unforeseen re-canistering and construction of a DTS somehow may be necessary, the NRC's ongoing financial assurance oversight would ensure that adequate funds are available for decommissioning and spent fuel management. See generally 10 C.F.R. § 50.82(a)(8)(v)-(vii).

NUREG-2157 §§ 1.8.2 (at 1-14), 1.8.3 (at 1-15).

⁶² Petition at 15.

nothing that requires HDI to submit now an alternative cash flow analysis to account for potential further delays by DOE some forty years in the future. And as discussed above, any delay by DOE in accepting SNF would lead to additional liability and recoveries from DOE, which could be used to provide additional financial assurances, if needed.

In summary, HDI based its DCE and its cash flow analysis on the best information available from DOE, which is sufficient to show adequate financial assurance. Petitioners claims about the costs of spent fuel management do not raise a material issue, are unsupported, and raise no genuine dispute with the Application.

2. HDI's Cost Estimate Accounts For Unanticipated Costs

Petitioners next claim that the LTA, Exemption Request, and PSDAR "fail[] to account for several significant, unanalyzed cost overrun scenarios." In support of their arguments, Petitioners point to radiologically contaminated groundwater at Indian Point, and claim that the PSDAR (and presumably the DCE) did not consider costs if this contamination is more significant "than Holtec currently perceives." Petitioners make a similar claim that Holtec "failed to adequately account for unforeseen costs associated with remediating non-radioactive contamination at the IPEC." And finally, Petitioners claim that Holtec failed to consider the costs associated with a possible radiological accident during decommissioning.

Petitioners' claims fundamentally presume that a large amount of undiscovered contamination exists at the Site and that remediation of this contamination will far exceed the DCE. This is purely speculative and differs from what the Petitioners (the communities where IPEC is

Petition at 16.

⁶⁵ *Id.* at 17-18.

⁶⁶ *Id.* at 19.

⁶⁷ *Id.* at 20.

located) well know—that IPEC is one of, if not the most, studied and monitored nuclear generation sites in the United States in terms of radiological conditions. And as a result of this extensive monitoring, which has been ongoing for over 15 years, volumes of public documentation exists on the nature and extent of contamination at the Site, including on-site groundwater.⁶⁸ HDI clearly identifies this fact in its DCE, stating, "events occurring during plant operation involving the spread of contamination in and around the facility, equipment, or site *are well documented and the fate and transport of contaminants are generally understood.*"

While there is always the possibility that HDI could discover more contamination during decommissioning as it removes buildings and foundations, as there is at any large nuclear decommissioning project, HDI specifically accounts for this possibility in its DCE and its conservative contingency allowance.⁷⁰ Even so, Petitioners' concern that undiscovered contamination is so extensive and will be so expensive to remediate that the NDTs will be exhausted is completely unsupported. Petitioners' assertion overlooks, and fails to engage with, the important safeguards provided by the other layers of NDT protection, including robust and continual oversight and the expected NDT surplus.⁷¹ In other words, the Application shows that significant funds exist that could pay for additional remediation if it is necessary.

See, e.g., IPEC Environmental and Groundwater Reports, http://www.safesecurevital.com/resources/reports.html ("IPEC Reports Website").

⁶⁹ DCE at 63 (emphasis added).

⁷⁰ *Id.* at 93-95.

See supra Part III (incorporating the discussion in the Ans. to NY Part V (p. 22-25)).

a. <u>Petitioners' Claim of Likely Additional, Substantial Radiological</u> Groundwater Contamination is Unsupported

Petitioners claim that the full extent of tritium and strontium-90 contaminated groundwater at the site is unknown and yet to be determined.⁷² But Petitioners offer no reliable support for this claim. Nor could they because, as they are aware, the groundwater radioactive contamination at the Site has been thoroughly investigated.⁷³ These publicly available reports show that there is no basis for Petitioners' claim that the extent of site groundwater contamination is unknown or not understood.

As Petitioners are aware, between September 2005 and September 2007, an environmental contractor hired by Entergy (GZA) conducted a comprehensive hydrogeological site investigation at IPEC.⁷⁴ GZA drafted a detailed report of its investigation, and Entergy submitted this report to the NRC in January 2008.⁷⁵ As a result of GZA's hydrogeological site investigation, Entergy implemented a long-term monitoring program ("LTMP") at Indian Point to monitor groundwater to detect and characterize current *and future* contaminant migration.⁷⁶ As part of this LTMP, GZA performs quarterly groundwater testing and maintains a network of 22 long-term monitoring transducers and data loggers, which record groundwater levels at the site, and GZA takes quarterly

⁷² Petition at 17-18.

See IPEC Reports Website, *supra* note 68 (Quarterly Groundwater Reports from September 2013 to December 2019).

GeoEnvironmental, Inc. ("GZA"), Hydrogeologic Site Investigation Report of the Indian Point Entergy Center in Buchanan, New York (Jan 7, 2008) (ML080320540) ("GZA HSI Report").

⁷⁵ Id

GZA, Memorandum – Synopsis of Long Term Monitoring Program at 1 (Jan 25, 2008) (ML080290204) ("GZA LTMP Memo").

water samples for radionuclide analysis.⁷⁷ The results of GZA's quarterly sampling and analysis are then made publicly available on an Entergy-sponsored public website.⁷⁸

As the public reports make clear, the scope and extent of the tritium and strontium contamination are understood, well-documented, and continually monitored. Moreover, contrary to Petitioners' assertions, the most recent quarterly report makes clear that both tritium and strontium levels and plume size *continue to decrease* as a result of the identification and elimination of leakage paths, Entergy's groundwater extraction system, and natural attenuation.⁷⁹

Despite the voluminous publicly available information, Petitioners still claim that the scope and extent of groundwater contamination are still unknown.⁸⁰ But Petitioners provide no support for this claim and instead simply provide a brief history of the groundwater contamination discoveries at the Site.⁸¹ As shown above, these historical events are already well documented and studied. While Petitioners try to use this history to infer that more groundwater contamination exists somewhere or that the extent of the contamination is somehow larger—contrary to the data in the monitoring reports—Petitioners offer no support for their claims.

b. <u>Petitioners' Claim of Likely Additional, Substantial Non-Groundwater Contamination is Unsupported</u>

Petitioners also claim that Holtec's review of the Historical Site Assessment cannot provide a basis for the DCE. Petitioners criticize the Historical Site Assessment as no more than "historical

GZA, IPEC Quarterly Long-Term Groundwater Monitoring Report, Report No. 43 at 2-1 (Dec. 19, 2019) (Quarter Two 2019), http://www.safesecurevital.com/pdf/19-12-19.pdf ("GZA Report 43").

See IPEC Reports Website, *supra* note 68. Entergy's testing and monitoring program reflects industry guidance developed by the Nuclear Energy Institute. See Nuclear Energy Institute, NEI 07-07, Industry Ground Water Protection Initiative – Final Guidance Document (Aug. 2007) (ML072600295) ("NEI 07-07").

⁷⁹ GZA Report 43 at 3-17, 4-1 to 4-2.

⁸⁰ Petition at 17-20.

⁸¹ *Id.* at 17-18.

records"⁸² and state their opinion that the NRC should require Holtec to instead conduct "a thorough site characterization to document the actual contamination at IPEC *before* finding that Holtec has provided adequate financial assurance."⁸³ But Petitioners offer no reliable support for their claims and fundamentally mischaracterize the Historical Site Assessment and its scope. Petitioners also ignore the other records HDI reviewed to complete its cost estimate.

Known and potential radiological and non-radiological contamination at the site is extensively cataloged in the *Historical Site Assessment for Indian Point Energy Center* ("HSA").⁸⁴ Consistent with NRC guidance, Entergy retained Radiation Safety and Control Services ("RSCS") to prepare the HSA to "assist in decommissioning planning" by identifying and evaluating "historical records and information pertaining to circumstances or events that may have resulted in radiological or non-radiological contamination during the operating history of the station."⁸⁵ As part of its preparation of the HSA, RSCS reviewed "historical information . . . to identify areas where contamination existed, remains, or *has the potential to exist.*"⁸⁶ This review of historical information included, among many other things, "records from the New York State Department of Environmental Conservation," files maintained under 10 C.F.R. § 50.75(g), and interviews with long-tenured site employees.⁸⁷

_

⁸² *Id.* at 19.

⁸³ *Id.* at 20 (emphasis in original).

Historical Site Assessment for Indian Point Energy Center, Tech. Support Doc. No. 19-002, Rev. 2 (Apr. 30, 2019) ("HSA"); see also NUREG-1575, Rev. 1, Multi-Agency Radiation Survey and Site Investigation Manual § 3 (Aug. 2000) (describing the purpose and use of an HSA and the procedure for conducting one) (ML003761445).

⁸⁵ HSA at 15.

⁸⁶ *Id.* (emphasis added).

⁸⁷ *Id.* at 15-16.

The HSA identifies potential radiological and non-radiological contamination (including asbestos, mercury, lead, and PCBs). Reference The HSA discusses known and potential radiological and non-radiological contamination in the sewage collection and storm drain systems. The HSA also identifies known and potential radiological and non-radiological impacts in buildings and structures, interior and exterior storage areas, and transformer yards. The above shows that Petitioners' claim that the HSA "did not include a detailed study of hazardous and non-hazardous waste" at Indian Point is incorrect. The above also shows that HSA is much more than a "historical record." To the contrary, the HSA extensively cataloged known contamination and areas of potential contamination, which is much like the type of investigation Petitioners are advocating for.

c. <u>HDI's Use Of The Historical Site Assessment And Other Records Was Appropriate</u>

Petitioners also claim that HDI's PSDAR and DCE are insufficient because HDI should have conducted a Phase 1 environmental assessment.⁹¹ To begin with, Petitioners cite no regulatory requirement to conduct the level of site characterization they want now in support of a PSDAR or DCE. This is unsurprising because there is none, as discussed below. Petitioners also fail to acknowledge the extensive documents HDI reviewed as part of its due diligence and referenced in the DCE. HDI explains that it reviewed the "IP1, 2 & 3 decommissioning records required by 10 CFR 50.75(g), and the draft Historical Site Assessment (HSA) prepared for ENOI."⁹² Based on its review of these documents, HDI concluded that "events occurring during plant operation involving

_

⁸⁸ *Id.* at 62-66.

⁸⁹ *Id.* at 67-69.

⁹⁰ *Id.* at 70-319.

⁹¹ Petition at 19.

DCE at 63. And HDI makes clear that the "site characterization activities" are to "supplement site historical knowledge and the HSA." PSDAR at 10.

the spread of contamination in and around the facility, equipment, or site are well documented, and the fate and transport of contaminants are generally understood."⁹³ By ignoring HDI's review of these documents, Petitioners fails to raise a genuine dispute with the Application.⁹⁴

As HDI states, along with the HSA, it reviewed documents that Entergy, as the current licensee, is required by Section 50.75(g) to maintain. Section 50.75(g) requires licensees to maintain:

- (1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. . . . These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.
- (2) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination; records of the cost estimates performed for the decommissioning funding plan or of the amount certified for decommissioning; and records of the funding method used for assuring funds if either a funding plan or certification is used.⁹⁶

By reviewing these documents, HDI would thus be aware of "spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site" and also of "locations of possible inaccessible contamination." And as HDI states, it considered these documents as part of its due diligence, and they are a basis for its cost estimate. 98

94 While Deti

⁹³ DCE at 63.

While Petitioners fault HDI for not conducting a full site characterization study before submitting its DCE and that "HDI plans to characterize site contamination *after* the licenses transfer," Petition at 18-20 (emphasis added), it is not clear that the type of characterization study Petitioners seeks could be accomplished now, while the reactors are operating.

DCE at 63 (stating HDI "reviewed decommissioning records required by 10 CFR 50.75(g)").

⁹⁶ 10 C.F.R. § 50.75(g)(1), (2).

⁹⁷ See id.

DCE at 63, 91 ("The DCE and schedule were prepared using information collected by HDI and CDI during the due diligence review period.").

HDI's due diligence review and its discussion in the PSDAR and DCE also fully adheres to the NRC's *Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors* ("NUREG-1713"). In particular, the NRC looks to see that a licensee reviewed 50.75(g) records to ensure that "the licensee has evaluated the anticipated extent of contamination on the facility and site based on information available in the decommissioning files" and confirm that "major factors that could affect the cost" have been considered. NUREG-1713 also states that the reviewer should check for "a *summary* of available characterization information on known and/or suspected environmental contamination," but does not require further detailed site characterization of the type Petitioners claim is necessary. By not acknowledging that HDI reviewed and considered these extensive historical records while preparing the DCE, Petitioners' claims related to the sufficiency of the DCE are unsupported and do not raise a genuine dispute with the Application.

d. <u>Petitioners' Other Claims On Unanticipated Costs Do Not Raise A</u> <u>Genuine Dispute With The Application</u>

Petitioners try to rely on the Board's ruling in the *Vermont Yankee* proceeding to argue that "cost overruns are commonplace," and that the Commission has recognized that the potential for unanticipated costs "warrant further consideration in a hearing." But there are two significant and distinguishing factors between *Vermont Yankee* and this proceeding. First, in *Vermont Yankee*, the State of Vermont challenged a license amendment request and argued that the recent discovery of strontium-90 in groundwater, which was discovered *after* the PSDAR was written, showed that Entergy did not accurately account for the potential cost of soil or groundwater contamination. ¹⁰² In

¹⁰¹ Petition at 18-19.

24

_

NUREG-1713, Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors at 13, 25 (Dec. 2004) (ML043510113) ("NUREG-1731").

¹⁰⁰ *Id.* at 26.

¹⁰² Vt. Yankee, LBP-15-24, 82 NRC at 87-89.

contrast, the existence and extent of groundwater contaminates are known and reflected in the PSDAR and DCE.¹⁰³ Second, Vermont's challenge rested heavily on the expert opinion submitted with their petition.¹⁰⁴ In contrast, Petitioners submitted no declarations to support their Petition in this proceeding. In short, *Vermont Yankee* involved the discovery of contamination after the PSDAR was written, which is not the case here, and relied on an expert declaration, which Petitioners did not submit. Thus, the *Vermont Yankee* decision does not support the admission of this Proposed Contention.

Petitioners also point to the decommissioning of Connecticut Yankee, where the discovery of groundwater and other contamination increased decommissioning costs.¹⁰⁵ But the soil remediation at Connecticut Yankee concluded in December 2005, before NEI's groundwater protection initiative began in 2007,¹⁰⁶ and before the extensive site characterization and groundwater monitoring was conducted at Indian Point. It is thus unclear how the early experience at Connecticut Yankee is informative in the discussion of groundwater contamination at Indian Point, which has been, and continues to be, extensively characterized using state-of-the-art techniques.

Petitioners also claim that "the PSDAR fails to consider the potential costs associated with a radiological incident [e.g., an accident involving spent fuel management] at the IPEC site." But

DCE at 63; see also supra Section III.B.2.a-b.

See Vt. Yankee, LBP-15-24, 82 NRC at 87-89 (citing expert opinion of Dr. Irwin).

Petition at 18-19. Petitioners also list Maine Yankee and Yankee Rowe as having discovered contamination during decommissioning, but does not discuss any specifics. Both Maine Yankee and Yankee Rowe were decommissioned before NEI's groundwater protection initiative began.

¹⁰⁶ See NEI 07-07.

Petition at 20.

consideration of this type of radiological accident is not required in a PSDAR. As the NRC makes clear, this is not the purpose of a PSDAR. The purpose of a PSDAR:

is to provide the NRC and the public with a *general overview of the licensee's proposed decommissioning activities* and to inform the NRC staff of the licensee's expected activities and schedule so that the staff can plan for inspections and make decisions about its oversight activities. The PSDAR is also a mechanism that informs the public of the proposed decommissioning activities before the conduct of those activities.¹⁰⁸

Petitioners point to no requirements for a PSDAR to include a discussion of potential accidents, nor could they. Similarly, (and presuming Petitioners meant to claim that the DCE should consider the costs of radiological incidents), the NRC does not require a consideration of these costs in a DCE either.¹⁰⁹ Petitioners' claims do not show a genuine dispute with the application because the NRC does not require the consideration of these potential costs.¹¹⁰

3. <u>Petitioners Fail To Support Their Claim That HDI's Contingency Allowance</u> Is Insufficient

Petitioners claim that HDI's "so-called contingency allowance is woefully deficient in several respects and fails to provide adequate financial assurance." Petitioners first claim that HDI's "Monte Carlo" analysis should be disclosed for the public and NRC to review. Petitioners' claim, however, is outside the scope of this proceeding. There is no requirement that HDI publicly release all supporting analyses generated using proprietary software. As stated above,

Regulatory Guide 1.185, Rev. 1, Standard Format and Content for Post-Shutdown Decommissioning Activities Report at 3 (June 2013) (emphasis added) ("Reg. Guide 1.185").

See Regulatory Guide 1.202, Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors at 1.202-6 (Feb. 2005) (discussing the information to be included in a DCE) ("Reg. Guide 1.202").

Additionally, NRC requires all nuclear licensees, including licensees of sites undergoing decommissioning, to maintain nuclear liability insurance at levels approved by the NRC. Insurance costs are accounted for in the PSDAR and DCE. *See e.g.*, PSDAR at 14.

Petition at 21.

¹¹² *Id*.

Petitioners appear to object to the fact that HDI did not list each discrete risk and contingency analyzed under this process, but there is no regulatory requirement for HDI to do so—and Petitioners cite none. This claim also does not raise a genuine dispute with the Application. In fact, this claim does not challenge the Application (or the PSDAR or DCE) at all.

Second, Petitioners also claim—without support—that HDI's contingency factor of 18 percent is insufficient and could quickly become depleted due to unforeseen events. 114 Contrary to Petitioners' claim, HDI's 18 percent contingency factor is in line with the 17.26 percent contingency factor for Unit 2 and 17.8 percent contingency factor for Unit 3 from Entergy's Preliminary Decommissioning Cost Analyses for these units. 115 Moreover, HDI's 18 percent contingency factor for IPEC is more than its contingency for Oyster Creek Nuclear Generating Station (15 percent) and Pilgrim Nuclear Power Station (17 percent). 116 This larger contingency at IPEC accounts for, in part, potential unforeseen contamination – exactly what a contingency is intended to do.

Third, Petitioners claim that HDI's calculated contingency allowance violates NRC rules in two ways: (1) the PSDAR does not discuss how Holtec accounted for "unforeseen conditions or expenses as they arise" in violation of 10 C.F.R. § 50.82(a)(8)(i)(B), and (2) "Holtec has not adequately demonstrated that it possesses the financial qualifications necessary to safely

¹¹³ *Id*.

¹¹⁴ *Id*. at 21-22.

Preliminary Decommissioning Cost Analysis for the Indian Point Energy Center, Unit 2 at 6-7 (Oct. 23, 2008) (ML083040378); Preliminary Decommissioning Cost Analysis for the Indian Point Energy Center, Unit 3 at 6-7 (Dec. 31, 2010) (ML103550608).

Oyster Creek Nuclear Generating Station Revised Site Specific Decommissioning Cost Estimate at 45 (Sept. 25, 2018) (ML18275A116); Pilgrim Power Station Site-Specific Decommissioning Cost Estimate at 41 (Nov. 16, 2018) (ML18320A040).

decommission the IPEC" as required by 10 C.F.R. 50.80(c)(1).¹¹⁷ But Petitioners' reliance on these to regulations is misplaced and does not raise a material issue.

Section 50.82(a)(8)(i)(B) states that "Decommissioning trust funds may be used by licensees if—(B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise." This section does not require unforeseen conditions to be addressed in the PSDAR, as Petitioners appear to claim, nor does it speak to the required showing of financial qualifications. ¹¹⁹

Section 50.80(c)(1) states that "[a]fter appropriate notice to interested persons, . . . the Commission will approve an application for the transfer of a license, if the Commission determines: (1) That the proposed transferee is qualified to be the holder of the license." But Petitioners have not explained how the Application fails to meet this standard or even how it relates to the contingency factor. Instead, Petitioners make only the broad and unsupported claim that to demonstrate its financial qualifications, Holtec must account for, and apparently list in great detail, every possible risk in its cost estimate. But there is no such requirement in Section 50.80(c)(1), or any other regulation, or NRC guidance.

C. Basis B (Financial Assurance) Is Inadmissible

In Basis B, Petitioners claim that Holtec is "financially unfit" to decommission Indian Point.

Specifically, Petitioners claim:

Petition at 22.

¹¹⁸ 10 C.F.R. § 50.82(a)(8)(i)(B).

See discussion supra Section III.A.

¹²⁰ 10 C.F.R. § 50.80(c)(1).

Absent additional assurances, Holtec's corporate structure and lack of assets or revenue streams makes Holtec financially unfit to decommission Indian Point.¹²¹

For the reasons discussed below, Basis B does not support an admissible contention. Basis B fails to raise an issue within the scope of this proceeding, fails to raise a material issue, is unsupported by facts or expert opinion, and does not show that a genuine dispute exists on a material issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

1. Holtec's Corporate Structure Is Immaterial, Unsupported, And Does Not Raise A Genuine Dispute With The Application

Petitioners complain that Holtec's "web of corporate ownership raises several red flags" and that Holtec's use of limited liability companies ("LLC's") means that these LLCs could one day declare bankruptcy after exhausting the NDTs and without having decommissioned the site. 122

Petitioners also claim that the various LLCs will allow Holtec to "siphon millions of dollars" from the NDTs by each entity taking profits from every task, thus inflating costs. 123

Petitioners' claim, however, is speculative and unsupported. To begin with, the acceptability of Holtec's corporate structure is confirmed by the corporate structure for the current licensees, which are LLCs owned by a series of other LLCs.¹²⁴ Petitioners' claim also ignores the clear weight of NRC precedent where the NRC has granted operating licenses to many LLCs to operate nuclear facilities, including the current licensees for IPEC. In fact, there are ten different LLCs currently licensed by the NRC to operate nuclear plants.¹²⁵ Petitioners also ignore NRC precedent where the NRC has approved license transfers of shutdown or shutting down nuclear

¹²³ *Id.* at 25.

¹²⁴ See LTA, fig. 1.

29

_

Petition at 22.

¹²² *Id.* at 24.

See NRC, List of Power Reactor Units (Oct. 9, 2019), https://www.nrc.gov/reactors/operating/list-power-reactor-units.html.

plants to LLCs for decommissioning purposes.¹²⁶ Based on these NRC precedents, the Petitioners' claim is immaterial, unsupported, and does not raise a genuine dispute with the Application.

Petitioners, though, claim that Holtec's layers of corporate ownership raise a concern that flawed assumptions or cost overruns could deplete the NDTs, because the LLCs would simply declare bankruptcy and walk away from the Site without completing the decommissioning. Petitioners' claim, however, ignores and fails to engage with the layers of NDT protection, as discussed above and in the Applicants' Answer to New York State. 128

As the Commission has held, its strict oversight and reporting requirements in its regulations "provide reasonable assurance that adequate funds will remain to complete decommissioning by requiring [the licensee] and the Staff to monitor the projected cost of decommissioning and available funding and ensure more funding is available as needed." Petitioners' claim is thus immaterial, unsupported, and fails to identify a genuine dispute with the Application.

2. <u>Petitioners' May Rely Solely On The NDTs To Show Adequate Financial Assurance</u>

Petitioners complain that Holtec has no revenue source other than the NDTs and that "Holtec has not identified any independent assets or revenue streams . . . that would provide a backstop if the trust fund is depleted." Petitioners appear to be arguing that Holtec is not

¹²⁸ See supra Part III (incorporating the discussion in the Ans. to NY Part V (p. 22-25)).

See, e.g., Order Approving Transfer of Licenses and Conforming Amendments Relating to Zion Nuclear Power Station, Units 1 & 2 (May 4, 2009) (ML082840443); Order Approving Transfer of the License for Oyster Creek Nuclear Generating Station and Conforming License Amendments (June 20, 2019) (ML19095A463).

Petition at 24.

Vt. Yankee, CLI-16-17, 84 NRC at 118; see also Exelon Generation Co. (Oyster Creek Nuclear Generating Station), CLI-19-06, 90 NRC __, __ (2019) (slip op. at 13) ("If new developments point to a projected funding shortfall, the NRC requires additional financial assurance to cover the estimated cost to complete the decommissioning.") (citation omitted).

Petition at 26.

permitted to rely solely on NDT funds to show adequate financial assurance. But petitioners cite no authority that prohibits Holtec from relying solely on the NDTs—nor could they, because NRC regulations contain no such prohibition.

Petitioners' argument also conflicts with NRC precedent. NRC Staff has twice approved license transfer applications for closed or closing nuclear generating plants where the transfer applicants relied exclusively on the funds in the NDTs to establish their financial qualifications. For both plants—Oyster Creek and Pilgrim—NRC staff found that the funds in the NDTs were sufficient to cover the estimated costs of spent fuel management and for decommissioning the plant and the ISFSI. And NRC Staff found that the reliance on funds available in the NDTs satisfied the financial assurance requirements of 10 C.F.R. §§ 50.33(f), 50.33(k)(1), 50.54(bb), 50.75, and 50.82(a).

But as to the Petitioners' claim that Holtec has no revenue source other than the NDTs, Petitioners ignores their future recoveries from the DOE for spent fuel management costs. HDI's decommissioning cash flow estimates for Indian Point Units 1, 2, and 3 in its DCE show that HDI expects to incur hundreds of millions of dollars in spent fuel management costs from 2021 through 2063, for which it could seek recovery. HDI conservatively has not relied on securing these recoveries in its cash flow analyses, and yet the NRC has found that "DOE reimbursement is a reasonable source of additional funding. In recent years DOE reimbursements have become more

See Oyster Creek License Transfer Safety Evaluation Report at 7-10 (June 20, 2019) (ML19095A457) ("Oyster Creek SER"); Pilgrim License Transfer Safety Evaluation Report at 7-15 (Aug. 23, 2019) (ML19235A300) ("Pilgrim SER").

Oyster Creek SER at 12; Pilgrim SER at 15. In both, NRC Staff found that 10 C.F.R. § 50.80(b) applied to the Application but was not part of the financial assurance findings for decommissioning. *See* Oyster Creek SER at 4, 22; Pilgrim SER at 3, 15.

Oyster Creek SER at 12; Pilgrim SER at 15.

DCE at 100-05, column 2 "50.54(bb) Spent Fuel Management Costs."

consistent and predictable despite the longevity of the litigation process and complexity of DOE standard settlement agreements."¹³⁵

3. <u>Holtec And Its Joint Venture Partner Have Significant Decommissioning Experience</u>

Petitioners claim that "Holtec has never decommissioned a nuclear facility before" and thus cannot be relied on to provide accurate financial projections. ¹³⁶ This ignores the fact that Holtec subsidiaries—including HDI—had similar LTAs approved and are now NRC licensees for two plants undergoing active decommissioning: Pilgrim Nuclear Power Station and Oyster Creek Nuclear Generating Station. ¹³⁷ Petitioners also ignore the decommissioning experience of several managers of Holtec and Comprehensive Decommissioning International ("CDI") (the joint venture between Holtec and SNC-Lavalin). ¹³⁸ As shown on their *Curricula Vitae*, HDI and CDI personnel have extensive, in-depth experience in decommissioning a wide variety of nuclear power plants, research reactors, and other facilities. ¹³⁹ CDI personnel also have extensive experience in technical areas, including nuclear security, waste management, dismantlement, project management, regulatory compliance, and environmental protection. ¹⁴⁰ In addition, to ensure institutional knowledge is retained, HDI also plans to retain an Entergy senior manager for an on-site leadership position and also seek to employ ENOI employees at the Site to support decommissioning. In sum, the above shows that Holtec, through HDI and CDI, has extensive decommissioning experience.

Vermont. Yankee – Safety Evaluation of License Transfer Request (License DPR-28, Docket Nos. 60-271 and 72-59) at 15 (Oct. 11, 2018) (ML18242A639).

Petition at 27.

Pilgrim – Letter, Order Approving Direct and Indirect Transfer of Renewed Facility Operating License to Holtec Pilgrim, LLC Owner and Holtec Decommissioning International, LLC, Operator (Aug. 22, 2019)
 (ML19170A101); Order Approving the Transfer of the License for Oyster Creek Nuclear Generating Station (June 20, 2019) (unpublished) (ML19095A458); see Oyster Creek SER at 7-10; Pilgrim SER at 7-15.

See LTA, Encl. 1 at 1 & Attach. C.

¹³⁹ See id.

¹⁴⁰ See id.

Additionally, HDI and CDI are now decommissioning two other facilities—Oyster Creek and Pilgrim. HDI and CDI expect to benefit from and deploy lessons learned from each project. In this way, Indian Point will benefit from the experience gained from these other sites.

4. <u>Petitioners Claim That HDI Did Not Meet NRC Regulatory Requirements is Unsupported</u>

Petitioners next claim that "HDI has not met the NRC's regulatory requirements" in 10 C.F.R. §§ 50.33(f)(2) and 50.82(a)(8)(vi). But Petitioners provide no explanation and no support for this claim.

Section 50.33(f) requires each application to include:

information sufficient to demonstrate to the Commission *the financial qualification of the applicant* to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought (2) If the application is for an operating license, the applicant shall submit information that demonstrates the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license.¹⁴²

Section 50.82(a)(8)(vi) states that:

If the sum of the balance of any remaining decommissioning funds, plus earnings on such funds calculated at not greater than a 2 percent real rate of return, together with the amount provided by other financial assurance methods being relied upon, does not cover the estimated cost to complete the decommissioning, the financial assurance status report must include additional financial assurance to cover the estimated cost of completion. ¹⁴³

Petitioners have not explained how the Application did not meet these sections, and Petitioners' claim does not support an admissible contention.

Petition at 28.

¹⁴² 10 C.F.R. § 50.33(f), (f)(2) (emphasis added).

¹⁴³ 10 C.F.R. § 50.82(a)(8)(vi).

D. Basis C (Exemption Request) Is Inadmissible

In Basis C, Petitioners claim that the "unconditional exemption request" will cause a funding shortfall in the NDTs. Specifically, Petitioners claim:

The License Transfer Application, forthcoming exemption request, and PSDAR incentivize Holtec to cut corners, resulting in significant public health, safety, and environmental risks. 144

Petitioners refer to the "forthcoming exemption request." But as noted above, HDI filed this request on February 12, 2020, the same day the Petitioners filed their Petition. That aside, as explained above and incorporated here, the NRC maintains a rigorous and comprehensive regulatory regime to provide continual assurance that funding for decommissioning remains adequate after a plant permanently ceases operation. Given the NRC's oversight of the NDTs, Basis C does not raise a material issue or demonstrate a genuine dispute with the application and fails to identify an admissible basis for a contention.

E. Petitioners' Proposed License Conditions Are Out-Of-Scope

Petitioners propose two license conditions should the Commission approve the Application. These proposed license conditions do not supply the proper basis for an admissible contention. But even more, the two proposed license conditions seek to impose legal obligations beyond the scope of NRC's authority. 48

Petitioners' first assert that the Commission issue a license condition requiring:

Petition at 28.

¹⁴⁵ See Exemption Request.

See generally 10 C.F.R. § 50.82(a); see also NUREG-1577, Rev. 1 ("Decommissioning funding assurance for nuclear power plants is governed by 10 CFR 50.33(k), 50.75, and 50.82 in a three-stage process.").

¹⁴⁷ Petition at 30-32.

Petitioners economic concerns related to the loss of tax revenue, decreased property values, and economic redevelopment of the Site (Petition at 2-3), are outside the scope of NRC's authority and thus outside the scope of this proceeding, see discussion supra Section I.

capping the profits that Holtec can exact from the [NDTs] and requiring that Holtec return to the local community any funds remaining after retiring the IPEC. Such a condition should also include designating additional funds to restoring the IPEC and rapidly returning the Site to productive use, and by guaranteeing the Holtec will meet its ongoing tax obligations to the local community.¹⁴⁹

As the Commission has noted, however, "the NRC's mission is solely to protect the public health and safety. It is not to make general judgments as to what is or is not otherwise in the public interest—other agencies such as . . . state public service commissions, are charged with that responsibility."¹⁵⁰ The Commission's pronouncement was made in response to the Town of Cortlandt's petition to intervene in the license transfer proceeding that transferred the licenses for Indian Point Units 1 and 2 to Entergy. As the NRC noted in rejecting a contention that the transfer was not in the public interest, "Cortlandt's 'public interest' issue seems to go beyond the NRC's statutory duties . . . we decline to admit it."¹⁵¹

So too here. Petitioners' request for a license condition capping Holtec profits and requiring local communities to receive any remaining NDT funds goes beyond the NRC's statutory duties to protect public health and safety and therefore its regulatory authority. Similarly, Petitioners request that the NRC require additional funds to restore IPEC and return it to "productive use" are also outside NRC's regulatory duties. NRC only oversees the radiological decommissioning of facilities so that they can be released for unrestricted use. Further site restoration and economic development

Petition at 30.

¹⁵⁰ Consol. Edison Co. of N.Y. (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 149 (2001).

¹⁵¹ Id.

of released sites are outside the NRC's purview.¹⁵² And HDI's tax obligations are also well beyond the scope of NRC's jurisdiction.

Petitioners' also ask the Commission to include a license condition that:

require Holtec to commit to robust financial assurance mechanism that ensure that sufficient capital exists to complete the decommissioning of Indian Point should the DTF become depleted due to the reasonable foreseeable cost overruns described [in the Petition]. 153

As discussed, Petitioners' claims of "foreseeable cost overruns" are speculative and unsupported. That said, and as also discussed, NRC already maintains a robust regulatory scheme to ensure adequate decommissioning funds are maintained. The NRC's oversight of this process ensures that funds remain available until decommissioning is completed. And should additional funds be required, NRC can require additional financial assurance from the licensee. In short, this proposed license condition is redundant and unneeded.

* * *

In summary, Proposed Contention 1 raises issues that are not material, are outside the scope of this proceeding, unsupported by fact or law, and fails to dispute the actual content of the Application, contrary to 10 C.F.R. § 2.309(f)(1)(iii)-(vi), and therefore, it should be denied as inadmissible.

IV. PROPOSED CONTENTION 2 (NEPA REVIEW) IS INADMISSIBLE

In Proposed Contention 2, Petitioners claim that the NRC must conduct an environmental review of the LTA, PSDAR, and Exemption Request together. Specifically, Petitioners allege:

See 1996 Decommissioning Rule, 61 Fed. Reg. at 39,285 ("The NRC's authority is limited to assuring that licensees adequately decommission their facilities with respect to cleanup and removal of radioactive material prior to license termination. Radiological activities that go beyond the scope of decommissioning, as defined in § 50.2, such as waste generated during operations or demolition costs for 'greenfield' restoration, are not appropriate costs for inclusion in the decommissioning cost estimate.").

¹⁵³ Petition at 30-31.

The Applications do not include the environmental review required by the National Environmental Policy Act ("NEPA") and NRC regulations.¹⁵⁴

Petitioners acknowledge that the NRC's regulations explicitly exclude license transfers from environmental review under 10 C.F.R. Part 51, absent "special circumstances." Although not entirely clear, Petitioners appear to claim that "special circumstances" exist here, and the NRC therefore must conduct an environmental review of the LTA, because the PSDAR and Exemption Request somehow transform the LTA into a *license amendment* authorizing "changes in actual operations," that purportedly pose "significant, unanalyzed environmental risks." Petitioners' fundamental claim, however, is incorrect. The Commission has held that "the PSDAR does not amend the license – and as such the licensee is not required to submit a corresponding environmental report." Nor does the Commission consider the submission and approval of a PSDAR a "major federal action" that requires the NRC to conduct an environmental assessment under NEPA. Thus, no environmental assessment of the PSDAR required. Furthermore, to the extent that Petitioners suggest the Exemption Request will evade environmental review unless its contention is granted, they disregard relevant facts. Applicants do not assert that the Exemption Request is subject to a categorical exclusion. In fact, the Exemption Request explicitly includes an

-

¹⁵⁴ *Id.* at 32.

Id. at 36, 39. Petitioners also claim that the PSDAR and Exemption Request are "integrally related components" of the LTA, thus the NRC should conduct an environmental assessment of "all three aspects of the transaction together." Id. at 37. This same argument was raised in the Vermont Yankee proceeding. Although the Commission directed NRC Staff to conduct an environmental assessment of Entergy's exemption request, it did not require a review of the PSDAR, maintaining that no environmental assessment of the PSDAR is required. Vt. Yankee, CLI-16-17, 84 NRC at 125-30.

Vt. Yankee, CLI-16-17, 84 NRC at 124 (citing 10 C.F.R. § 50.82(a)(4)(i); 10 C.F.R. § 51.53(d); 1996 Decommissioning Rule, 61 Fed. Reg. at 39,284 ("A more formal public participation process is appropriate at the termination stage of decommissioning")).

¹⁵⁷ *Id.* at 125-27.

environmental assessment, ¹⁵⁸ which the NRC will review in due course in a separate licensing action (and which Petitioners neither acknowledge nor dispute).

As to the LTA itself, license transfer applications are exempt from environmental review under the NRC's Categorical Exclusion Rule, 10 C.F.R. § 51.22.¹⁵⁹ By challenging the categorical exclusion of the LTA, this Proposed Contention constitutes an impermissible challenge to the NRC's Categorical Exclusion Rule and is outside the scope of this proceeding.¹⁶⁰ Even if Proposed Contention 2 is not an impermissible challenge to the Categorical Exclusion Rule, it is not admissible because Petitioners' claim that the Categorical Exclusion Rule does not apply because of the existence of "special circumstances" is unsupported and does not raise a genuine dispute with the Application. For these reasons, Proposed Contention 2 should be rejected as inadmissible for its failure to meet the requirements for an admissible contention in 10 C.F.R. § 2.309(f)(1).

A. <u>Proposed Contention 2 Is An Impermissible Challenge To The NRC's</u> Categorical Exclusion Rule

The NRC's environmental protection regulations include a "Categorical Exclusion Rule" that identifies certain Commission actions that are not subject to environmental review. The Categorical Exclusion Rule states:

(a) Licensing, regulatory, and administrative actions eligible for categorical exclusion shall meet the following criterion: The action belongs to a category of actions which the Commission, by rule or regulation, has declared to be a categorical exclusion, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment.

150

Exemption Request Encl. § 7.

¹⁵⁹ Vt. Yankee, CLI-16-17, 84 NRC at 128-30.

The Exemption Request, however, is not subject to the categorical exclusion and will undergo an environmental assessment. *See, e.g.*, Entergy Nuclear Operations Inc; Pilgrim Nuclear Power Station, 84 Fed. Reg. 43,186, 43,187 (Aug. 20, 2019) (finding of no significant impact regarding exemption request to use NDT funds for spent fuel management activities and Pilgrim Nuclear Power Station.).

- (b) Except in special circumstances, as determined by the Commission upon its own initiative or upon request of any interested person, an environmental assessment or an environmental impact statement is not required for any action within a category of actions included in the list of categorical exclusions set out in paragraph (c) of this section. Special circumstances include the circumstance where the proposed action involves unresolved conflicts concerning alternative uses of available resources within the meaning of section 102(2)(E) of NEPA.
- (c) The following categories of actions are categorical exclusions:

(21) Approvals of direct or indirect transfers of any license issued by NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license. 161

The Commission has excluded license transfers from environmental review by rule since 1998. 162 In this rule, the Commission stated that "the NRC staff has completed many Environmental Assessments related to license transfers, and these assessments have uniformly found that there are no significant environmental effects from license transfers." ¹⁶³ The Commission also emphasized that this categorical exclusion applies only to "license transfers and associated administrative amendments to reflect transfers. Requests for license amendments that involve changes in actual operations or . . . health and safety related activities" are not part of the categorical exclusion.164

The Categorical Exclusion Rule explicitly exempts the Application from environmental review. 165 It also exempts the Applicants' request for administrative amendments to reflect the

¹⁰ C.F.R. § 51.22 (emphasis added).

Streamlined Hearing Process for NRC Approval of License Transfers, 63 Fed. Reg. 66,721, 66,728 (codified at 10 C.F.R. pts. 2 and 51) (Dec. 3, 1998) ("Categorical Exclusion Rule").

Id. at 66,728 (emphasis added).

¹⁶⁴ Id.

¹⁰ C.F.R. § 51.22(c)(21).

license transfer.¹⁶⁶ NRC rules and regulations, including the Categorical Exclusion Rule, are not subject to challenge in an adjudicatory proceeding unless a petitioner seeks and receives a waiver to do so.¹⁶⁷ Petitioners have not submitted a waiver request in this proceeding. Thus, their challenge to the Categorical Exclusion Rule is barred, and the proposed contention should be rejected.

B. No "Special Circumstances" Exist To Exempt The Application From The Categorical Exclusion Rule

As discussed, the Categorical Exclusion Rule excludes license transfer applications from environmental review. That said, Section 51.22(b) provides an exception to the Categorical Exclusion Rule if "special circumstances, as determined by the Commission upon its own initiative or upon the request of an interested person" are found to exist. Petitioners claim that special circumstances exist here and that the categorical exclusion should not apply to the Application, but Petitioners do not fully articulate what those special circumstances are. In any event, they have not satisfied their burden under 10 C.F.R. § 2.309(f)(1) to demonstrate an admissible contention.

It appears that Petitioners allege the existence of "special circumstances" here because the PSDAR and Exemption Request purportedly transform the LTA into a license amendment authorizing "changes in actual operations," that purportedly pose "significant, unanalyzed environmental risks." They also appear to claim that these alleged license changes themselves create two "special circumstances." The first is that the "potential for significant cost overruns"

¹⁶⁶ *Id*.

¹⁶⁷ 10 C.F.R. § 2.335.

^{168 10} C.F.R. § 51.22(b). This requires the submission of a waiver request under 10 C.F.R. § 2.335(b) in which a participant to an adjudicatory proceeding may request a waiver of a regulation by showing that "special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation (or a provision of it) would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b); see also Energy Solutions, LLC (Radioactive Waste Import/Export Licenses), CLI-11-3, 73 NRC 613, 619-20 (2011) (Petitioners filed a waiver request under Part 110 to seek to argue that the NRC was required to conduct an environmental assessment of the import application). As noted above, Petitioners have not submitted a waiver request.

¹⁶⁹ Petition at 36, 39.

related to spent fuel management costs could lead to a significant shortfall in the NDT, "causing drastic environmental consequences." The second is that the "expanded scope of the proposed license transfer . . . invite[s] significant and unanalyzed environmental risk," because more contamination could be discovered at the site. Petitioners made substantially similar claims in support of Proposed Contention 1. For the same reasons discussed above, these claims contradict well-documented facts, are speculative, and ignore extensive ongoing monitoring at the site, and thus, they cannot provide a basis for an admissible contention here either. Even more, Petitioners do not explain why these two potential issues qualify as special circumstances, how they raise "significant and unanalyzed environmental risk," much less how an environmental review could help address them.

Instead, Petitioners only offer the following conclusory statements: (1) that the "License Transfer Application necessarily includes other components—the forthcoming Exemption Request and PSDAR—that invite significant and unanalyzed environmental risk," and (2) that "[a]pplying the categorical exclusion for ordinary license transfers in this case, without consideration of the significant environmental consequences that could arise from granting the Forthcoming Exemption Request and approving the PSDAR, would violate [the Commission's duty to protect public health and safety]."¹⁷² As discussed above, the Commission has already determined that PSDARs are *not* license amendments and do not require an environmental assessment, ¹⁷³ and the LTA is subject to a categorical exclusion. ¹⁷⁴ Furthermore, to the extent that Petitioners suggest "special circumstances"

¹⁷⁰ *Id.* at 38.

¹⁷¹ *Id.* at 38.

¹⁷² *Id.* at 40.

¹⁷³ Vt. Yankee, CLI-16-17, 84 NRC at 125-27.

¹⁷⁴ 10 C.F.R. § 51.22(c)(21).

exist because the Exemption Request otherwise will evade environmental review, its claim disregards the fact that the Exemption Request explicitly includes an environmental assessment—and that the NRC will review that environmental assessment in full compliance with NEPA.

Petitioners' conclusory statements, which contradict settled law and relevant facts, do not support a finding that special circumstances exist nor provide a basis for an admissible contention.

Simply put, although Petitioners claim special circumstances exist, they provide no support for this claim and instead offer unsupported opinions. Also, the issues they identify related to SNF management and unidentified contamination—even if they are assumed to be true—would apply equally to other decommissioning sites and would apply to Indian Point irrespective of the outcome of this proposed transaction. As a result, the Categorical Exclusion Rule applies to the Application, and no environmental review is necessary.

C. Petitioners' Out-Of-Scope Challenges Regarding The Alleged Environmental Impacts Of The PSDAR And Exemption Request Are Unsupported, Immaterial, And Fail To Raise A Genuine Dispute With The Application

Even if Petitioners had shown that the PSDAR and Exemption Request transform the LTA into a license amendment and are therefore subject to environmental review in this license transfer proceeding—which they have not done—their other arguments are meritless and inadmissible. As noted above, Petitioners claim the Exemption Request and PSDAR pose "significant, unanalyzed environmental risks." But Petitioners fail even to acknowledge the environmental assessment in the Exemption Request. Thus, Petitioners' claim about the Exemption Request is entirely unsupported and fails to dispute the actual document. And Petitioners' assertions regarding alleged "cost overruns" and additional contamination contradict well-documented facts, are speculative, and

-

Petition at 40.

ignore extensive ongoing monitoring at the site, as detailed in response to Contention 1 above, and thus they cannot provide a basis for an admissible contention here either.

Petitioners also claim that the PSDAR "fails to comply with 10 C.F.R. § 50.82(a)(4)(i) because it does not address the reasonably foreseeable potential impacts of climate change on spent fuel management, including storage in spent fuel pools and dry cask storage." Petitioners claim that the PSDAR must address the impacts of climate change because climate change is not addressed in either the Indian Point Site-Specific Environmental Impact Statement ("SEIS")¹⁷⁷ prepared for license renewal or the Decommissioning GEIS. ¹⁷⁸ But Petitioners are incorrect.

To begin with, it is not at all clear what impacts from climate change on SNF management Petitioners are concerned with given the design and locations of the spent fuel pools and ISFSI. In any event, the SEIS addresses climate change for the proposed license renewal period. This included an analysis of climate models and a discussion of the potential for an increase in precipitation, flooding, and sea-level rise.¹⁷⁹ Petitioners specifically cite the potential for an increase in severe storms (like Superstorm Sandy) that could result from climate change.¹⁸⁰ But the SEIS also established there are uncertainties on whether there will be more or fewer severe weather and hurricanes, stating, "Projected hurricane activity from models is uncertain: some models project increases in hurricanes and intensity, whereas others project a decrease in hurricanes and intensity. However, models are in agreement that hurricane-associated precipitation will increase." ¹⁸¹

_

¹⁷⁶ *Id.* at 41.

NUREG-1437, Supplement 38, Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 (June 2012).

¹⁷⁸ Petition at 40-42.

¹⁷⁹ NUREG-1437 at 5-53 to 5-63.

Petition at 42.

¹⁸¹ NUREG-1437 at 5.57.

Despite the climate change discussion in the SEIS, Petitioners claim the Applicants' PSDAR must also address climate change. But Petitioners have cited no authority for their claim that the PSDAR must address the impacts of climate change—nor is there any. Neither NRC regulations nor regulatory guidance contains such a requirement. As a result, Petitioners claim that the PSDAR violates Section 50.82(a)(4)(i) because it does not address climate change, is not within the scope of this proceeding, and does not raise a genuine dispute with the application.

* * *

In summary, Proposed Contention 2 is outside the scope of this proceeding, unsupported by fact or law, immaterial, and fails to dispute the actual content of the Application, contrary to 10 C.F.R. § 2.309(f)(1)(iii), (v), and (vi), and therefore, it should be denied as inadmissible.

V. CONCLUSION

As established above, Petitioners have not proffered a contention that satisfies the contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). Therefore, the Commission should reject the Petition in its entirety.

¹⁸² See 10 C.F.R. § 50.82; Reg. Guide 1.185.

Respectfully submitted,

Executed in Accord with 10 C.F.R. § 2.304(d)

Peter D. LeJeune, Esq.
Jason B. Tompkins, Esq.
Alan D. Lovett, Esq.
BALCH & BINGHAM LLP
1710 Sixth Avenue North
Birmingham, AL 35203-2015
(205) 226-8769
plejeune@balch.com
jtompkins@balch.com
alovett@balch.com

Executed in Accord with 10 C.F.R. § 2.304(d)

William Gill, Esq. HOLTEC INTERNATIONAL 1 Holtec Boulevard Camden, NJ 08104 (856) 797-0900 w.gill@holtec.com

Counsel for Holtec International and Holtec Decommissioning International, LLC

Executed in Accord with 10 C.F.R. § 2.304(d)

John E. Matthews, Esq.
Paul M. Bessette, Esq.
Scott D. Clausen, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 739-5524
john.matthews@morganlewis.com
paul.bessette@morganlewis.com
scott.clausen@morganlewis.com

Executed in Accord with 10 C.F.R. § 2.304(d)

Susan H. Raimo, Esq. ENTERGY SERVICES, LLC 101 Constitution Avenue, N.W. Washington, D.C. 20001 (202) 530-7330 sraimo@entergy.com

Executed in Accord with 10 C.F.R. § 2.304(d)

William B. Glew, Jr., Esq. ENTERGY SERVICES, LLC 639 Loyola Avenue, 22nd Floor New Orleans, LA 70113 (504) 576-3958 wglew@entergy.com

Signed (electronically) by Ryan K. Lighty

Ryan K. Lighty, Esq. Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue, N.W. Washington, D.C. 20004 (202) 739-5274 ryan.lighty@morganlewis.com

Counsel for Entergy Nuclear Operations, Inc., Entergy Nuclear Indian Point 2, LLC, and Entergy Nuclear Indian Point 3, LLC

Dated in Washington, DC this 9th day of March 2020

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of:)
)	Docket Nos. 50-003-LT,
ENTERGY NUCLEAR OPERATIONS, INC.,	50-247-LT,
ENTERGY NUCLEAR INDIAN POINT 2, LLC,	50-286-LT, and
ENTERGY NUCLEAR INDIAN POINT 3, LLC,	72-051-LT-2
HOLTEC INTERNATIONAL, and HOLTEC	
DECOMMISSIONING INTERNATIONAL, LLC	
	March 9, 2020
(Indian Point Nuclear Generating Unit Nos. 1, 2, and 3)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I certify that, on this date, a copy of the foregoing "Applicants' Answer Opposing Petition for Leave to Intervene and Hearing Request Filed by the Town of Cortlandt, Village of Buchanan, and Hendrick Hudson School District" was served upon the Electronic Information Exchange (the NRC's E-Filing System), in the above-captioned docket.

Signed (electronically) by Ryan K. Lighty Ryan K. Lighty, Esq. MORGAN, LEWIS & BOCKIUS LLP 1111 Pennsylvania Avenue, N.W. Washington, D.C. 20004 (202) 739-5274 ryan.lighty@morganlewis.com

Counsel for Entergy Nuclear Operations, Inc., Entergy Nuclear Indian Point 2, LLC, and Entergy Nuclear Indian Point 3, LLC