**UNITED STATES OF AMERICA**
**NUCLEAR REGULATORY COMMISSION**

**BEFORE THE COMMISSION**

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

# APPLICANTS' ANSWER OPPOSING PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST FILED BY THE STATE OF NEW YORK


Peter D. LeJeune, Esq.
Jason B. Tompkins, Esq.
Alan D. Lovett, Esq.
BALCH & BINGHAM LLP

William Gill, Esq.
HOLTEC INTERNATIONAL

*Counsel for Holtec International and Holtec Decommissioning International, LLC*

John E. Matthews, Esq.
Paul M. Bessette, Esq.
Ryan K. Lighty, Esq.
Scott D. Clausen, Esq.
MORGAN, LEWIS & BOCKIUS LLP

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

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

## TABLE OF CONTENTS


I. INTRODUCTION ..... 1

II. PROCEDURAL HISTORY ..... 6

III. LEGAL AND REGULATORY FRAMEWORK ..... 7

A. Decommissioning ..... 7

B. Spent Nuclear Fuel Management ..... 11

C. Reactor License Transfers ..... 11

D. Contention Admissibility ..... 14

IV. PROPOSED CONTENTION NY-1 (INVESTMENT RETURNS) IS INADMISSIBLE ..... 17

A. Both DECON and SAFSTOR Involve Periods of Safe Storage ..... 18

B. The DCE Specifically Describes a Brief Period of Safe Storage ..... 20

V. PROPOSED CONTENTION NY-2 (COST ESTIMATES) IS INADMISSIBLE ..... 22

A. Basis A (Exemption Request) Is Inadmissible ..... 25

1. As a Matter of Law, Applicants May Rely on Plausible Assumptions and Forecasts to Demonstrate Financial Assurance ..... 26

2. Applicants' Assumption That the Exemption Request Will Be Granted Is Entirely Plausible ..... 28

3. The Merits of the Exemption Request Are Outside the Scope of This Proceeding and the State's Contrary Claim Is Unsupported ..... 29

4. NYS's Demand That NRC Mandate the Deposit of DOE Recoveries Into the NDTs Is Outside the Scope of This Proceeding, Unsupported, Immaterial, And Does Not Raise a Genuine Dispute with the Application ..... 30

B. Basis B (Contingency) Is Inadmissible ..... 31

1. The Extent of Groundwater Contamination at IPEC Is Well Studied, Well Understood, Extensively Documented, and Publicly Available, and the State's Claim of Likely Additional Substantial Contamination Is Unsupported ..... 33

2. The Extent of Non-Ground Water Contamination at IPEC Is Also Well Studied, Well Understood, Extensively Documented, and Publicly Available, and the State's Claim of Likely Additional Substantial Contamination is Unsupported ..... 36

3. HDI's Review of Records and the Historical Site Assessment Show That HDI's DCE Reasonably Reflects the Cost To Remediate Radiological and Non-Radiological Contamination ..... 38

4. The State's Claims About Insufficient Contingency Costs Are Unsupported and Do Not Raise a Genuine Dispute with the Application ..... 41
C. Basis C (Site Restoration) Is Inadmissible ..... 44
1. The DCE and PSDAR Appropriately Describe Site Restoration Activities ..... 45
2. The State's Demand for Adjudication of Contractual Obligations and State Regulatory Requirements Is Outside the NRC's Jurisdiction ..... 48
3. The State's Assertion That the DCE Underestimates Site Restoration Costs Is Unsupported, Immaterial, and Fails to Demonstrate a Genuine Dispute with the Application ..... 49
4. The State's Suggestion that Applicants Will Not Comply with All Valid Legal Requirements Is Unsupported and Inappropriate ..... 51
D. Basis D (Gas Pipeline) Is Inadmissible ..... 54
1. The State's Speculation Regarding Alleged Pipeline-Related Cost Increases Is Insufficient for an Admissible Contention ..... 55
2. The State Fails to Demonstrate That the DCE Materially Underestimates Decommissioning Costs ..... 56
3. NRC Regulations Do Not Require Itemization of Industrial Safety Considerations In a PSDAR or DCE ..... 57
E. Basis E (SNF Pickup Date) Is Inadmissible ..... 61
1. The DCE Reasonably Relies on the Most Recent DOE Guidance ..... 61
2. The State's Speculative Claims Regarding Increased Costs Are Immaterial, Unsupported, and Fail to Dispute the Application ..... 64
F. Basis F (SNF Transportation Preparation) Is Inadmissible ..... 66
1. The DCE Accounts for Costs Related to Transferring SNF to DOE ..... 67
2. The State's Claim That a Dry Transfer Station Must Be Constructed Is Unsupported ..... 69
G. Basis G (Legacy Mixed Waste) Is Inadmissible ..... 71
H. Basis H (Segmentation Timeline) Is Inadmissible ..... 73
1. The State's Speculation Regarding IPEC Segmentation Timelines Is Unsupported and Fails to Dispute the Application ..... 73
2. The State's Speculation Regarding Costs Associated with Speculative Segmentation Delays Is Unsupported, Immaterial, and Fails to Dispute the Application ..... 77
I. Basis I (NDT Commingling) Is Inadmissible ..... 81

VI. PROPOSED CONTENTION NY-3 (FINANCIAL QUALIFICATIONS) IS INADMISSIBLE ..... 84

A. Applicants May Rely on NDTs to Demonstrate Financial Qualifications, and the State's Contrary Claims Are Unsupported, Immaterial, Out-of-Scope, and Do Not Raise a Genuine Dispute with the Application..... 85

B. The State's Claim That the Proposed Licensees Lack Other Revenue Is Unsupported and Does Not Raise a Genuine Issue with the Application..... 88

C. The State's Repeated Claims from Proposed Contentions NY-1 and NY-2 Are Inadmissible for the Same Reasons Explained Above ..... 89

D. The State's Various Other Assertions Fail to Demonstrate an Admissible Contention..... 90

1. The State's Comments on the Staff's Review Are Outside the Scope of This Proceeding ..... 90

2. The State's Failure to Request Access to Proprietary Material Does Not Supply an Admissible Basis for a Contention ..... 91

3. The State's Claims that Holtec Could Commingle Funds from Multiple Decommissioning Projects Is Unsupported Speculation ..... 92

4. The State's Suggestion That LLCs Cannot Hold NRC Licenses Is Unsupported, Immaterial, and Does Not Raise a Genuine Dispute with the Application..... 93

5. The State's Claims About Past Holtec Actions and Its Past Management Culture Are Outside the Scope of This Proceeding ..... 94

VII. CONCLUSION..... 95

## TABLE OF AUTHORITIES

**NRC Cases**

*AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235 (2009) ..... 12

*Balt. Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325, 350 (1998) ..... 15

*Commonwealth Edison Co.* (Zion Station, Units 1 & 2), ALAB-616, 12 NRC 419 (1980) ..... 12

*Crow Butte Res., Inc.* (N. Trend Expansion Project), CLI-09-12, 69 NRC 535 (2009) ..... 80

*Curators of the Univ. of Missouri* (TRUMP-S Project), CLI-95-1, 41 NRC 71 (1995) ..... 15, 86

*Curators of the Univ. of Missouri* (TRUMP-S Project), CLI-95-8, 41 NRC 386 (1995) ..... 52

*Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207 (2003) ..... 14, 15

*Dominion Nuclear Conn., Inc*. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349 (2001) ..... 14

*Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373 (2002) ..... 26

*Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328 (1999) ..... passim

*Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704 (2012) ..... 17, 55, 65

*Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321 (2015) ..... 15, 76

*Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-19-11, 91 NRC __ (Dec. 17, 2019) (slip op.) ..... 23

*Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), LBP-15-4, 81 NRC 156 (2015) ..... 15, 86

*Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99 (2016) ..... 25, 48, 64, 87

*Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), CLI-16-8, 93 NRC 463 (2016) ..... 29

*Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), LBP-15-24, 82 NRC 68 (2015) ..... 29

*Exelon Generation Co., LLC* (Oyster Creek Nuclear Generating Station),
CLI-19-6, 90 NRC __ (June 18, 2019) (slip op.) ..... 25, 87

*Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4),
CLI-01-17, 54 NRC 3 (2001) ..... passim

*Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4),
LBP-01-6, 53 NRC 138, 159-60 (2001) ..... 46, 61, 72

*Ga. Inst. of Tech.* (Ga. Tech Research Reactor), LBP-95-6, 41 NRC 281 (1995) ..... 18, 42

*GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station),
CLI-00-6, 51 NRC 193 (2000) ..... 15, 48, 52, 86

*Holtec Int'l* (HI-STORE Consolidated Interim Storage Facility),
LBP-19-4, 90 NRC __ (May 7, 2019) (slip op.) ..... 92

*La. Energy Servs.* (Claiborne Enrichment Center),
CLI-97-15, 46 NRC 297 (1997) ..... 13

*N. Atl. Energy Serv. Corp.* (Seabrook Station, Unit 1),
CLI-99-6, 49 NRC 201 (1999) ..... passim

*N. Ind. Pub. Serv. Co*. (Bailly Generating Station, Nuclear-1),
ALAB-207, 7 AEC 957 (1974) ..... 52

*N. States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 & 2),
CLI-10-27, 72 NRC 481 (2010) ..... 83, 92

*NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1),
CLI-12-5, 75 NRC 301 (2012) ..... 15, 18, 42, 86

*Pac. Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2),
CLI-03-2, 57 NRC 19 (2003) ..... 52

*Power Auth. of N.Y.* (James A. Fitzpatrick Nuclear Power Plant and Indian Point,
Unit 3), CLI-00-22, 52 NRC 266 (2000) ..... 17

*PowerTech (USA), Inc.* (Dewey-Burdock *In Situ* Uranium Recovery Facility),
CLI-16-20, 84 NRC 219 (2016) ..... 93

*PPL Susquehanna LLC* (Susquehanna Steam Elec. Station, Units 1 & 2),
CLI-07-25, 66 NRC 101, 107 (2007) ..... 48

*PPL Susquehanna, LLC* (Susquehanna Steam Elec. Station, Units 1 & 2),
CLI-15-8, 81 NRC 500 (2015) ..... 14, 15, 55

*Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation),
CLI-00-13, 52 NRC 23 (2000) ..... 13

*Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation),
CLI-98-13, 48 NRC 26 (1998) ..... 17

*Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation),
LBP-00-35, 52 NRC 364 (2000) ..... 93

*Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998) ..... 17

*Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), CLI-89-3, 29 NRC 234 (1989) ..... 16

*Shaw Areva MOX Serv., LLC* (Mixed Oxide Fuel Fabrication Facility), CLI-15-9, 81 NRC 512 (2015) ..... 90

*Susquehanna Nuclear, LLC* (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-17-4, 85 NRC 59 (2017) ..... 14, 15, 16, 58

*USEC, Inc.* (Am. Centrifuge Plant), CLI-06-10, 63 NRC 451 (2006) ..... 17

**Federal Court Cases**

*N. Anna Envtl. Coal. v. NRC*, 533 F.2d 655 (D.C. Cir. 1976) ..... 12

*Nat'l Whistleblower Ctr. v. NRC*, 208 F.3d 256 (D.C. Cir. 2000) ..... 15

*Nat'l Whistleblower Ctr. v. NRC*, 531 U.S. 1070 (2001) ..... 15

**Statutes**

42 U.S.C. § 2011, *et seq* ..... 11

42 U.S.C. § 2234 ..... 12

42 U.S.C. § 2239 ..... 13

**Regulations**

10 C.F.R. § 2.1315 ..... 13, 14

10 C.F.R. § 2.206 ..... 67

10 C.F.R. § 2.304 ..... 6

10 C.F.R. § 2.309 ..... passim

10 C.F.R. § 2.314 ..... 6

10 C.F.R. § 2.335 ..... passim

10 C.F.R. § 20.1402 ..... 46, 48

10 C.F.R. § 50.2 ..... 7, 8, 9, 83

10 C.F.R. § 50.33 ..... passim

10 C.F.R. § 50.34 ..... 58

10 C.F.R. § 50.40 ..... 22, 84

10 C.F.R. § 50.54 ..... passim

10 C.F.R. § 50.75 ..... passim

10 C.F.R. § 50.80 ..... passim

10 C.F.R. § 50.82 ..... passim
10 C.F.R. § 51.22 ..... 14
10 C.F.R. § 61.55 ..... 8
10 C.F.R. § 72.30 ..... 22, 25, 26, 84
10 C.F.R. § 961.11 ..... 67
29 C.F.R. Part 1910 ..... 60

**Federal Register Publications**

Changes to Adjudicatory Process; Final Rule, 69 Fed. Reg. 2,182 (Jan. 14, 2004) ..... 13

Decommissioning of Nuclear Power Reactors; Final Rule, 61 Fed. Reg. 39,278 (July 29, 1996) ..... 8

Decommissioning Trust Provisions, 67 Fed. Reg. 78,332, 78,338 (Dec. 24, 2002) ..... 19

Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry, 62 Fed. Reg. 44,071 (Aug. 19, 1997) ..... 12

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, 14

Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168 (Aug. 11, 1989) ..... 23, 57, 80, 90

Streamlined Hearing Process for NRC Approval of License Transfers; Final Rule, 63 Fed. Reg. 66,721 (Dec. 3, 1998) ..... 13, 14

**Other Authorities**

NRC, Regulatory Guide 1.185, "Standard Format and Content for Post-Shutdown Decommissioning Activities Report," Rev. 1 (June 2013) ..... 8, 58

NRC, Regulatory Guide 1.202, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors" (Feb. 2005) ..... 23, 58, 72

NUREG/CR-5884, "Revised Analyses of Decommissioning for the Reference Pressurized Water Reactor Power Station" (Nov. 1995) ..... passim

NUREG/CR-6174, "Revised Analyses of Decommissioning for the Reference Boiling Water Reactor Power Station" (July 1996) ..... 18, 19, 21

NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Vol. 1 (May 1996) ..... 18, 19

NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)," Rev. 1 (Aug. 2000) ..... 10, 40

NUREG-1577, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," Rev. 1 (Feb. 1999) ..... 12, 86

NUREG-1713, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors," Final Report (Dec. 2004) ..... 40, 41

NUREG-2157, "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel," Vol. 1 (Sept. 2014) ..... 63, 64

OECD/NEA, INTERNATIONAL STRUCTURE FOR DECOMMISSIONING COSTING OF NUCLEAR INSTALLATIONS (2012) ..... 68

**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 STATE OF NEW YORK

## I. INTRODUCTION

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, "Applicants") submit this Answer opposing the Petition of the State of New York ("NYS" or "State") for Leave to Intervene and for a Hearing ("Petition") filed on February 12, 2020.[1]

[1] Petition of the State of New York for Leave to Intervene and for a Hearing (Feb. 12, 2020) (ML20043E118) ("Petition"). The Petition package (ML20043F273) included six declarations: Declaration of Warren K. Brewer in Support of New York Petition (Feb. 11, 2020) (ML20043E121) ("Brewer Decl."); Declaration of Daniel J. Evans in Support of New York Petition (Feb. 4, 2020) (ML20043E122) ("Evans Decl."); Declaration of George W. Heitzman in Support of New York Petition (Feb. 5, 2020) (ML20043E123) ("Heitzman Decl."); Declaration of Alyse L. Peterson in Support of New York Petition (Feb. 10, 2020) (ML20043E125) ("Peterson Decl."); Declaration of Timothy B. Rice in Support of New York Petition (Feb. 7, 2020) (ML20043E126) ("Rice Decl."); Declaration of Chiara Trabucchi in Support of New York Petition (Feb. 7, 2020) (ML20043E128) ("Trabucchi Decl.").

The State seeks to intervene in the proceeding associated with the Applicants' November 21, 2019 license transfer application ("LTA" or "Application").[2] In the LTA, Applicants have requested that the U.S. Nuclear Regulatory Commission ("NRC") approve the transfer of control of the operating licenses for Indian Point Nuclear Generating Unit Nos. 1, 2, and 3 (referred to individually as "IP1," "IP2," or "IP3," and collectively as the "Indian Point Energy Center" or "IPEC"), as well as the general license for the IPEC Independent Spent Fuel Storage Installation ("ISFSI") (collectively, the "Licenses"). Specifically, 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") (collectively with HDI, "Holtec LLCs") and (2) the transfer of ENOI's operating authority to HDI.[3] Approval of these transfers is sought to effectuate a transaction described in the Membership Interest Purchase and Sale Agreement ("MIPA") attached to the LTA.[4] 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 shutdown and defueled.

HDI is a special purpose entity formed by Holtec to be the licensed operator that will decommission nuclear power plants (including IPEC). HDI is expected to contract with Comprehensive Decommissioning International, LLC ("CDI"), a company jointly-owned by HDI (the majority owner) and SNC-Lavalin Group's subsidiary, Kentz USA, Inc., whereby CDI

---

2 *See* NL-19-084, 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" (Nov. 21, 2019) (ML19326B953) ("LTA" or "Application").

3 The LTA further requests that the NRC "approve conforming administrative amendments to the Licenses to reflect the proposed transfer."

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

would manage and perform the day-to-day activities, including decommissioning activities, to maintain compliance with the Licenses and NRC regulations, subject to HDI's direct oversight and control as the licensed operator.

By way of background, licensees typically choose one of two decommissioning strategies: DECON or SAFSTOR. DECON is a general strategy in which, soon after the nuclear facility closes, it is prepared for a brief period of safe storage during which the spent nuclear fuel is removed from the spent fuel pool; and shortly thereafter, radioactive contaminants are removed or decontaminated to a level that permits release of the property and termination of the NRC license.[5] And SAFSTOR is a strategy in which the facility is maintained during an extended period of safe storage (usually many decades) to allow radioactivity to decay; and afterwards, the plant is dismantled and the property decontaminated.[6]

HDI plans 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"), reflecting its decommissioning plans following the proposed transfers of the Licenses.[7] In addition, HDI submitted a separate Exemption Request seeking NRC approval for HDI to use a portion of the IPEC Nuclear Decommissioning Trust ("NDT") funds for spent fuel management and site restoration activities.[8]

---

5 *See* NRC Backgrounder, "Decommissioning Nuclear Power Plants," at 1 (July 2018) (ML040340625).

6 *Id*.

7 *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).

8 *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").

In its Petition, the State notes that it "supports prompt, thorough, and safe decommissioning and site restoration at Indian Point."[9] The Applicants fully share this goal. As explained in further detail below, NRC regulations applicable to the LTA require a demonstration that reasonable assurance exists that proposed licensees are financially qualified to carry out the activities for which the licenses are sought—here, decommissioning IPEC. At the time of the proposed transfer in the LTA, all reactors at IPEC will be permanently shutdown and defueled. For shutdown reactors, the financial qualification requirement can be satisfied by a demonstration that the funds in the NDTs are sufficient to complete decommissioning.[10] The Application here provides such a demonstration by showing that the NDT values will be greater than the expected costs of decommissioning, as presented in HDI's DCE.

In its Petition, the State argues the financial qualification requirement has not been satisfied for three primary reasons. First, in Proposed Contention NY-1, the State claims that NRC regulations prohibit Applicants' NDT cash flow analysis from assuming a 2% annual real rate of return. Second, in Proposed Contention NY-2, it asserts that, for various reasons, costs of decommissioning have been underestimated in the DCE. And third, in Proposed Contention NY-3, the State argues (among other things) that Applicants may not rely on the sufficiency of the NDT to demonstrate financial qualifications. As explained in this Answer, each of these arguments is meritless, and none of the proposed contentions satisfies all six admissibility criteria in 10 C.F.R. § 2.309(f)(1). Thus, the Petition must be denied.

---

9 Petition at 1.

10 *See, e.g.*, Oyster Creek License Transfer Safety Evaluation Report (June 20, 2019) (ML19095A457) ("Oyster Creek License Transfer SER"); Pilgrim License Transfer Safety Evaluation Report (Aug. 23, 2019) (ML19235A300) ("Pilgrim License Transfer SER").

In summary, Proposed Contention NY-1 is based on a faulty reading of the applicable regulation, which fully permits an assumed 2% annual real rate of return on Applicants' NDT funds. And Proposed Contention NY-3 seeks to impose a higher standard for financial qualifications than that imposed by NRC regulations, as demonstrated by established and recent agency precedent that reveals the baseless nature of the State's demand. These proposed contentions should be rejected because they fail to satisfy the contention admissibility criteria, and because the State's imprecise reading of the regulations and agency precedent fails to identify any unmet requirement in the LTA.

Proposed Contention NY-2 is comprised of nine purported bases—essentially sub-contentions—asserting that various costs have been underestimated in the DCE. As explained in significant detail below, each and every assertion is meritless. As a general matter, the State's arguments opine about various hypothetical scenarios and assert, without factual or quantitative support—and in some cases, with substantial facts to the contrary—that such speculative scenarios *might* result in costs above those estimated in the DCE. As a matter of law, this type of speculation is insufficient for an admissible contention. But even if it were sufficient, and even assuming *arguendo* costs might be higher than expected, the State fails to dispute or engage with all of the various *additional* safeguarding mechanisms imposed by NRC's regulations that are specifically intended to prevent the type of negative impacts to the NDT postulated by NYS. Thus, NYS also has failed to demonstrate the materiality of its claims in Proposed Contention NY-2.

Overall, the State's arguments appear to mistake the NRC's "reasonable assurance" standard as a requirement to demonstrate *absolute assurance now*—even before the project has begun. But as a matter of law, that is simply not the case. For the reasons set forth below, the

Commission should deny the Petition in its entirety for failing to proffer an admissible contention.[11]

## II. PROCEDURAL HISTORY

On November 21, 2019, Applicants filed the aforementioned LTA.[12] On January 23, 2020, the NRC published in the *Federal Register* a notice 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 (within 20 days of the notice) hearing requests and intervention petitions ("Hearing Opportunity Notice").[13] The Hearing Opportunity Notice also contemplated that potential parties may need access to the Sensitive Unclassified Non-Safeguards Information ("SUNSI") in the LTA for contention drafting purposes; thus, it directed those potential parties to request such access from the Applicants or file a motion with the Commission.[14] NYS did not request SUNSI access prior to the February 12, 2020 filing deadline, but did timely file its Petition proffering three proposed contentions. Applicants timely file this Answer opposing the Petition in accordance with the provisions of 10 C.F.R. § 2.309(i)(1).

---

[11] NYS 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.

[12] *See* LTA, Transmittal Letter at 1-2.

[13] 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, 3,949 (Jan. 23, 2020) ("Hearing Opportunity Notice").

[14] *Id*. at 3,950.

## III. LEGAL AND REGULATORY FRAMEWORK

### A. Decommissioning

Under NRC regulations, decommissioning a nuclear reactor means to safely remove the facility from service, reduce residual radioactivity to a level that allows releasing the property for unrestricted use (or restricted use subject to conditions, not proposed here) in accordance with NRC regulations in 10 C.F.R. Part 20, Subpart E, and terminate the license.[15] NRC regulations require that applicants and licensees provide "reasonable assurance" that funds will be available for the decommissioning process.[16] The primary methods of providing financial assurance for decommissioning permitted by the NRC are through (1) prepayment; (2) an external sinking fund; (3) a surety, insurance, or other guarantee; or (4) a combination of these or equivalent mechanisms.[17]

Once a licensee decides to cease operations permanently, NRC regulations impose additional requirements that govern three sequential phases for decommissioning activities: (1) initial activities; (2) major decommissioning and storage activities; and (3) license termination activities.[18] The decommissioning process begins when a licensee certifies to the NRC Staff that it has permanently ceased operations and it has permanently removed fuel from the reactor vessel.[19] NRC regulations require a licensee to submit a PSDAR prior to or within

---

15 10 C.F.R. § 50.2.

16 *Id.* § 50.75(a). The NRC requires nuclear power plant licensees to report to the agency the status of their decommissioning funds at least once every two (2) years, annually within five (5) years of the planned shutdown, and annually once the plant ceases operation. *Id.* § 50.75(f)(2).

17 *Id.* § 50.75(e)(1)(i)-(iii), (vi).

18 *See generally id.* § 50.82(a).

19 *Id.* § 50.82(a)(1)(i)-(ii).

two years following the permanent cessation of operations.[20] The Staff notices its receipt of the PSDAR, makes the PSDAR available for public comment, and holds a public meeting on its contents.[21] The PSDAR serves to inform the public and NRC Staff of the licensee's proposed activities, but approval is not required under the NRC rules.[22]

Thus, absent any objections from the NRC Staff, the licensee may commence "major decommissioning activities" ninety (90) days after the Staff receives the PSDAR.[23] Under NRC regulations, a licensee may not perform decommissioning activities that would "[f]oreclose release of the site for possible unrestricted use; [r]esult in significant environmental impacts not previously reviewed; or [r]esult in [the lack of] reasonable assurance that adequate funds will be available for decommissioning."[24]

The PSDAR must include a site-specific DCE.[25] Once a licensee submits its DCE, it generally is allowed access to the balance of the NDT fund monies for the remaining decommissioning activities with "broad flexibility."[26] However, the use of the NDT fund is limited in three important respects. First, withdrawals from the fund must be "for expenses for

---

20 *Id.* § 50.82(a)(4)(i).

21 *Id.* The Staff presents comments received at the public meeting held on the PSDAR and makes available to the public a written transcript of the meeting. *See* NRC, Regulatory Guide 1.185, "Standard Format and Content for Post-Shutdown Decommissioning Activities Report," Rev. 1 at 4 (June 2013)(ML13140A038) ("RG 1.185"). As discussed further below, the PSDAR process does not give rise to a hearing opportunity.

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

23 10 C.F.R. § 50.82(a)(5). A "major decommissioning activity" for a nuclear power plant is defined as "any activity that results in permanent removal of major radioactive components, permanently modifies the structure of the containment, or results in dismantling components for shipment containing greater than class C waste in accordance with [10 C.F.R.] § 61.55." *Id.* § 50.2.

24 *Id.* § 50.82(a)(6).

25 *Id.* § 50.82(a)(4)(i).

26 *See* 1996 Decommissioning Rule, 61 Fed. Reg. at 39,285.

'legitimate decommissioning activities' consistent with the definition of decommissioning in 10 C.F.R. § 50.2."[27] Second, the expenditure must not reduce the value of the NDT "below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise."[28] Finally, the withdrawals must not "inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license."[29]

Additionally, the Staff is required to monitor the licensee's use of the NDT via its review of the licensee's annual financial assurance status reports.[30] Those reports must include, among other information, the amount spent on decommissioning activities, the amount remaining in the fund, and an updated estimate of the costs required to complete decommissioning.[31] If the licensee or NRC identifies a shortfall between the remaining funds and the updated cost to complete decommissioning (as a result of these annual status reports or otherwise), then the licensee must provide additional financial assurance.[32]

Unless otherwise authorized, the site must be decommissioned within sixty (60) years of the plant shutting down.[33] The licensee remains subject to NRC oversight until decommissioning is completed and the license is terminated. The licensee must submit a license

---

27 10 C.F.R. § 50.82(a)(8)(i)(A).

28 *Id.* § 50.82(a)(8)(i)(B).

29 *Id.* § 50.82(a)(8)(i)(C).

30 *Id.* § 50.82(a)(8)(v).

31 *Id.* § 50.82(a)(8)(v)(A)-(B).

32 *Id.* § 50.82(a)(8)(vi). The determination whether a shortfall exists takes into account a two (2) percent annual real rate of return.

33 *Id.* § 50.82(a)(3).

termination plan ("LTP") at least two (2) years before the planned license termination date.[34] The NRC, in turn, must notice receipt of the LTP in the *Federal Register*, make the plan available to the public for comment, schedule a public meeting near the facility to discuss the plan's contents, and offer an opportunity for a public hearing on the license amendment associated with the LTP.[35] The Commission may not approve the LTP (via license amendment) and terminate the license until it makes the findings set forth in 10 C.F.R. § 50.82(a)(10) and (a)(11), respectively.[36]

As part of the license termination process, the licensee conducts a sequence of site surveys consistent with the approach in the Multi-Agency Radiation Survey and Site Investigation Manual ("MARSSIM").[37] The first step is a Historical Site Assessment ("HSA"), which already has been completed at IPEC as discussed in further detail in Section V.B below. An HSA is an investigation to collect existing information describing a site's history related to potential, likely, or known sources of radioactive and other site contamination.[38] The HSA is followed by a site characterization survey later in the decommissioning process (to determine the nature and extent of contamination) and eventually a final status survey (to demonstrate satisfaction of the applicable release criteria).[39]

---

34 *Id.* § 50.82(a)(9)(i).

35 *Id.* § 50.82(a)(9)(iii).

36 *Id.* § 50.82(a)(10)-(11).

37 NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)," Rev. 1 (Aug. 2000) (ML003761445) ("NUREG-1575").

38 *See generally id*. at 3-1.

39 *Id*. at 2-23, 2-24.

### B. Spent Nuclear Fuel Management

NRC regulations also address the need to ensure adequate funds for the management of spent nuclear fuel. Within two (2) years following permanent cessation of operations or five (5) years before expiration of the reactor operating license, whichever occurs first, a licensee must submit written notification to the NRC "for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor following permanent cessation of operation of the reactor" until such fuel is transferred to the U.S. Department of Energy ("DOE").[40] Licensees also must notify the NRC of any significant changes in the proposed Irradiated Fuel Management Plan ("IFMP") as described in the initial notification.[41] The DCE required by the PSDAR must include the projected costs of managing spent fuel until the spent fuel is assumed to be removed from the site.[42] Once a licensee files that DCE, it must report annually to the NRC on the status of its funding to manage spent fuel, including the amount of funds available, the projected cost of managing spent fuel until it is removed by the DOE, and, if there is a funding shortfall, a plan to obtain additional funds to cover the cost.[43]

### C. Reactor License Transfers

Under Section 184 of the Atomic Energy Act of 1954, as amended ("AEA"),[44] an NRC reactor license, or any right thereunder, may not be "transferred, assigned[,] or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control

---

40 10 C.F.R. § 50.54(bb).

41 *Id.*

42 *Id.* § 50.82(a)(4)(i).

43 *Id.* § 50.82(a)(8)(vii).

44 Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919 (codified as amended at 42 U.S.C. §§ 2011, *et seq*.).

of [the] license to any person," unless the NRC first gives its consent in writing.[45] This statutory requirement is codified in 10 C.F.R. § 50.80 and applies to both direct and indirect license transfers.[46] A transfer of control may involve either the licensed operator or any individual licensed owner of the facility.[47] Before approving a license transfer, the NRC reviews, among other things, the technical and financial qualifications of the proposed transferees.[48] The transfer review, in other words, focuses on the "potential impact on the licensee's ability both to maintain adequate technical qualifications and organizational control and authority over the facility[,] and to provide adequate funds for safe operation and decommissioning."[49]

To grant a license transfer application, the NRC must find "reasonable assurance" of financial qualifications. License transfer applicants for reactors that will be permanently shutdown at the time of the transfer may rely *solely* on the adequacy of the NDT to demonstrate reasonable assurance.[50] Longstanding Commission precedent makes clear that the reasonable assurance standard does not require an applicant to meet an "absolute" or "beyond a reasonable doubt" standard.[51] In other words, "reasonable assurance" is not synonymous with "absolute

---

45 AEA § 184 (codified as amended at 42 U.S.C. § 2234).

46 *See* NRC Backgrounder, "Reactor License Transfers," at 1-2 (Jan. 2020) (ML040160803). A direct license transfer occurs when an entity seeks to transfer a license it holds to a different entity (*e.g.*, when a plant is to be sold or transferred to a new licensee in whole or part). *See id*. An indirect license transfer takes place when there is a transfer of "control" of the license or of a license holder (*e.g.*, as a result of a merger or acquisition at high levels within or among corporations. *See id.*

47 *See id.* at 2.

48 *See* 10 C.F.R. §§ 50.80(b)(1)(i), (c)(1); *see also* NUREG-1577, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," Rev. 1 (Feb. 1999) (ML013330264) ("NUREG-1577").

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

50 *See, e.g.*, Pilgrim License Transfer SER; Oyster Creek License Transfer SER.

51 *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 262 n.142 (2009); *Commonwealth Edison Co.* (Zion Station, Units 1 & 2), ALAB-616, 12 NRC 419, 421 (1980); *N. Anna Envtl. Coal. v. NRC*, 533 F.2d 655, 667-68 (D.C. Cir. 1976) (rejecting the argument that reasonable assurance

assurance." The NRC historically has interpreted "reasonable assurance" with the understanding that "some risks may be tolerated and something less than absolute protection is required."[52] As particularly relevant here, "the mere casting of doubt" on some aspect of an application is legally insufficient "to defeat a finding of reasonable assurance."[53]

The AEA requires that the NRC offer an opportunity for hearing on a license transfer.[54] In 1998, the NRC adopted Subpart M of 10 C.F.R. Part 2 (10 C.F.R. §§ 2.1300 to 2.1331) authorizing the use of a streamlined license transfer process with informal legislative-type hearings, rather than formal adjudicatory hearings.[55] These rules cover any direct or indirect license transfer for which NRC approval is required, including those transfers that require license amendments and those that do not.[56] Section 2.1315 codifies the Commission's generic determination that any conforming amendment to an operating license that only reflects the license transfer action involves a "no significant hazards consideration."[57] That same regulation

---

requires proof beyond a reasonable doubt and noting that the licensing board equated "reasonable assurance" with the preponderance standard).

52 Memorandum from F. Brown, Director, Office of New Reactors to New Reactor Business Line, "Expectations for New Reactor Reviews," at 4 (Aug. 29, 2018) (ML18240A410).

53 *Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 31 (2000) (citing *La. Energy Servs.* (Claiborne Enrichment Center), CLI-97-15, 46 NRC 297 (1997); *N. Atl. Energy Serv. Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 222 (1999)).

54 AEA § 189.a(1)(A) (codified as amended at 42 U.S.C. § 2239(a)(1)(A)) ("In any proceeding under this chapter, for . . . application to transfer control, . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.").

55 *See* Streamlined Hearing Process for NRC Approval of License Transfers; Final Rule, 63 Fed. Reg. 66,721, 66,722 (Dec. 3, 1998) ("Subpart M Rule"); *see also* Changes to Adjudicatory Process; Final Rule, 69 Fed. Reg. 2,182, 2,214 (Jan. 14, 2004) (retaining streamlined process under Subpart M for license transfers without substantive changes).

56 *See* Subpart M Rule, 63 Fed. Reg. at 66,727.

57 10 C.F.R. § 2.1315(a).

expressly provides that "[a]ny challenge to the administrative license amendment is limited to the question of whether the license amendment accurately reflects the approved transfer."[58]

As part of the same rulemaking to streamline license transfer proceedings, the Commission also promulgated 10 C.F.R. § 51.22(c)(21). That regulation categorically excludes from environmental review "[a]pprovals of direct or indirect transfers of any license issued by [the] NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license." And the regulation reflects the NRC's finding that this category of action does not "individually or cumulatively have a significant effect on the human environment."[59]

### D. Contention Admissibility

Petitions to intervene must "set forth with particularity" the contentions a petitioner seeks to have litigated in a hearing.[60] The requirements for an admissible contention are set forth in 10 C.F.R. § 2.309(f)(1)(i)-(vi) and also described in the Hearing Opportunity Notice.[61] The Commission's contention admissibility requirements are "strict by design."[62] They seek "to ensure that NRC hearings 'serve the purpose for which they are intended: to adjudicate *genuine, substantive safety and environmental issues* placed in contention by qualified intervenors.'"[63]

---

58 *Id* § 2.1315(b).

59 *See* Subpart M Rule, 63 Fed. Reg. at 66,728.

60 *PPL Susquehanna, LLC* (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-15-8, 81 NRC 500, 503-04 (2015) (quoting 10 C.F.R. § 2.309(f)(1)); *Susquehanna Nuclear, LLC* (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-17-4, 85 NRC 59, 74 (2017).

61 *See* Hearing Opportunity Notice, 85 Fed. Reg. at 3,949.

62 *Dominion Nuclear Conn., Inc*. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

63 *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003) (quoting *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999)) (emphasis added) (internal citation omitted).

The requirements thus reflect a "deliberate effort to prevent the major adjudicatory delays caused in the past by ill-defined or poorly-supported contentions that were admitted for hearing although 'based on little more than speculation.'"[64] To warrant an adjudicatory hearing, proposed contentions thus must have "some reasonably specific factual or legal basis."[65] The petitioner alone bears the burden to meet the standards of contention admissibility.[66]

Under 10 C.F.R. § 2.309(f)(1), a petitioner must explain the basis for each proffered contention by stating alleged facts or expert opinions that support the petitioner's position and on which the petitioner intends to rely in litigating the contention at hearing.[67] To be admissible, the issue raised must fall within the scope of the proceeding and be material to the findings that the NRC must make with respect to the application.[68] Contentions that challenge NRC regulations,[69] seek to impose requirements stricter than those imposed by the agency,[70] or opine on the manner in which Staff should conduct its review[71] are all outside the scope of NRC adjudicatory proceedings. A contention also must provide sufficient information to show a genuine dispute

---

64 *Susquehanna*, CLI-15-8, 81 NRC at 504 (quoting *Oconee*, CLI-99-11, 49 NRC at 334).

65 *Id.* (quoting *Millstone*, CLI-03-14, 58 NRC at 213).

66 *See Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 325, 329 (2015) ("[I]t is Petitioners' responsibility . . . to formulate contentions and to provide 'the necessary information to satisfy the basis requirement' for admission") (internal citation omitted).

67 10 C.F.R. § 2.309(f)(1)(ii), (v).

68 10 C.F.R. § 2.309(f)(1)(iii)-(iv); *Susquehanna*, CLI-17-4, 85 NRC at 74.

69 10 C.F.R. § 2.335(a).

70 *See Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), LBP-15-4, 81 NRC 156, 167 (2015); *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 315 (2012); *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 206 (2000); *Curators of the Univ. of Missouri* (TRUMP-S Project), CLI-95-1, 41 NRC 71, 170 (1995).

71 *See, e.g.*, *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 25 (2001) (quoting *Balt. Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325, 350 (1998), *aff'd sub nom Nat'l Whistleblower Ctr. v. NRC*, 208 F.3d 256 (D.C. Cir. 2000), *cert. denied,* 531 U.S. 1070 (2001)) ("'[I]t is the license application, not the NRC Staff review, that is at issue in our adjudications.'").

with the applicant on a material issue of law or fact.[72] The contention must refer to the "specific portions of the application . . . that the petitioner disputes," along with the "supporting reasons for each dispute; or, if the petitioner believes that an application fails altogether to contain information required by law, the petitioner must identify each failure, and provide supporting reasons for the petitioner's belief."[73]

Notably, petitioners must provide far more than a voluminous batch of affidavits (as NYS has done here, repeatedly incorporating by reference over 800 pages of material into each contention and sub-contention[74]) with conclusory assertions to adequately support a contention. As the Commission has explained:

> Commission practice is clear that a petitioner may not simply incorporate massive documents by reference as the basis for or as a statement of his contentions. . . . Such a wholesale incorporation by reference does not serve the purposes of a pleading. . . . The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point. The Commission cannot be faulted for not having searched for a needle that may be in a haystack.[75]

Even if a petitioner provides specific references to alleged support, the Commission has further explained that "'[b]are assertions and speculation,' *even by an expert*, are insufficient to trigger a

---

72 10 C.F.R. § 2.309(f)(1)(vi); *Susquehanna*, CLI-17-4, 85 NRC at 74.

73 *Susquehanna*, CLI-17-4, 85 NRC at 74 (citing 10 C.F.R. § 2.309(f)(1)(vi)).

74 Petition at 6 (¶ 1); 14 (¶ 12); 21 (¶ 33); 28 (¶ 56); 34 (¶ 77); 38 (¶ 90); 43 (¶ 105); 46 (¶ 114); 49 (¶ 127); 53 (¶ 139), 64 (¶ 23).

75 *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), CLI-89-3, 29 NRC 234, 240-41 (1989) (citations omitted).

full adjudicatory proceeding."[76] "[A]n expert opinion that merely states a conclusion . . . without providing a reasoned basis or explanation for that conclusion is inadequate."[77]

## IV. PROPOSED CONTENTION NY-1 (INVESTMENT RETURNS) IS INADMISSIBLE

In Proposed Contention NY-1, NYS alleges that the cash flow analysis in the DCE impermissibly assumes investment returns on the funds in the NDT. More specifically, NYS asserts:

> The Holtec LLCs have failed to comply with 10 C.F.R. §§ 50.75(b)(1) and (e)(1)(i) because the license transfer application and the supporting PSDAR and decommissioning cost estimate impermissibly assume an annual two percent real rate of return on nuclear decommissioning trust monies.

Under 10 C.F.R. § 50.75(e)(1)(i), a site-specific decommissioning estimate "may take credit for projected earnings on the prepaid decommissioning trust funds, using up to a [two] percent annual real rate of return from the time of future funds' collection through the projected decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate." In NY-1, the State claims that neither the DECON approach (which HDI has chosen) generally, nor the HDI DCE specifically, contemplate a period of safe storage.[78] Thus, according to NYS, the Applicants are prohibited from assuming an annual two percent real rate of return. But as explained below, the State is incorrect on all counts. NYS simply misreads the applicable regulation and disregards the

---

[76] *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704, 714 (2012) (emphasis added) (citation omitted).

[77] *USEC, Inc.* (Am. Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (emphasis added) (quoting *Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998), *aff'd*, CLI-98-13, 48 NRC 26 (1998)); *see also Power Auth. of N.Y.* (James A. Fitzpatrick Nuclear Power Plant and Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 315 (2000) ("Unsupported hypothetical theories or projections, even in the form of an affidavit, will not support invocation of the hearing process.").

[78] Petition at 6, 7.

content of the DCE, which is insufficient for an admissible contention.[79] These defects render NY-1 inadmissible because it is unsupported by fact or law, as required by 10 C.F.R. § 2.309(f)(1)(v), and because it fails to demonstrate a genuine dispute with the Application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

### A. Both DECON and SAFSTOR Involve Periods of Safe Storage

As noted in the introduction to this Answer, licensees typically choose one of two decommissioning strategies: DECON or SAFSTOR. These general strategies were first conceived in the NRC's original decommissioning studies—NUREG/CR-0130 for pressurized water reactors ("PWRs") and NUREG/CR-0672 for boiling water reactors ("BWRs").[80] These studies were subsequently updated in NUREG/CR-5884 for PWRs and NUREG/CR-6174 for BWRs.[81]

The crux of Proposed Contention NY-1 is the State's unsupported claim that DECON "does *not* contemplate a period of safe storage,"[82] and that *only* the SAFSTOR strategy involves a "period of safe storage."[83] However, this assertion is incorrect. As the NRC has explained:

> DECON, as defined by NUREG/CR-5884 and NUREG/CR-6174, comprises four distinct periods of effort: (1) preshutdown planning/engineering and regulatory reviews, (2) plant deactivation and *preparation for storage* (no dismantling activities are conducted

---

79 *Seabrook*, CLI-12-5, 75 NRC at 312 (noting a petitioner's "ironclad obligation" to review the application and relevant support *thoroughly and accurately*); *Ga. Inst. of Tech.* (Ga. Tech Research Reactor), LBP-95-6, 41 NRC 281, 300 (1995) (holding that a petitioner's "imprecise reading" of the application and alleged support "cannot serve to generate an issue suitable for litigation").

80 *See* NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Vol. 1, Part 7, Decommissioning Methods § 7.2.2 (May 1996) ("NUREG-1437"), *available at* https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/v1/part07.html#_1_176.

81 *Id*. (citing NUREG/CR-5884, "Revised Analyses of Decommissioning for the Reference Pressurized Water Reactor Power Station" (Nov. 1995) (ML14008A187) ("NUREG/CR-5884"); NUREG/CR-6174, "Revised Analyses of Decommissioning for the Reference Boiling Water Reactor Power Station" (July 1996) (ML14008A186) ("NUREG/CR-6174")).

82 Petition at 6 (emphasis in original).

83 *Id*.

> during this period that would affect the safe operation of the spent fuel pool), (3) *plant safe storage* with concurrent operations in the spent-fuel pool until the pool inventory is zero, and (4) decontamination and dismantlement of the radioactive portions of the plant, leading to license termination . . . .
>
> In NUREG/CR-5884 and NUREG/CR-6174, SAFSTOR is described as five distinct periods of effort, with the initial three periods identical to those of DECON. The fourth period is *extended* safe storage (50 years) with no fuel in the reactor storage pool, and the fifth period is decontamination and dismantlement of the radioactive portions of the plant.[84]

In other words, *both* DECON and SAFSTOR necessarily must involve periods of safe storage. The key difference is that SAFSTOR explicitly involves an *additional* period of "extended" safe storage. The State's claim that 10 C.F.R. § 50.75(e)(1)(i) limits the assumed two percent annual real rate of return to licensees using the SAFSTOR method is unsupported. And the condition in 10 C.F.R. § 50.75(e)(1)(i) requiring that a site-specific estimate include a "period of safe storage" clearly can be satisfied by licensees using the DECON method.

The State purports to find support for its erroneous interpretation of 10 C.F.R. § 50.75(e)(1)(i) in the Statement of Considerations ("SOC") for a 2002 rulemaking, in which it claims the Commission "explicitly rejected" application of the earnings credit for licensees using the DECON method.[85] The State offers no further explanation of its argument in this regard. Nor could it, because the SOC page cited by NYS does *not* support its claim. Rather, the SOC explains that licensees certifying to the *generic formula amount* for decommissioning funding *may not* assume investment returns under the SAFSTOR method, whereas those with a site-

---

[84] NUREG-1437 §§ 7.2.2.1, 7.2.2.2, and 7.2.2.3 (emphasis added). NUREG-1437 also recognizes that, "[b]ecause of the delays in development of the federal waste management system, it may be necessary to continue operation of a dry fuel storage facility on the reactor site after the reactor systems have been dismantled and the reactor nuclear license terminated." *Id*. § 7.2.2.1. In other words, it contemplates a fifth (for DECON) or sixth (for SAFSTOR) period which entails ongoing ISFSI operations.

[85] Petition at 8 (citing Decommissioning Trust Provisions, 67 Fed. Reg. 78,332, 78,338 (Dec. 24, 2002)).

specific DCE *may* assume investment returns under the SAFSTOR method. And it further explains that licensees certifying to the generic formula and using the DECON method are limited to taking a pro-rata credit for 7 years. But the SOC does not discuss *any* limitation on licensees using the DECON method and certifying to a site-specific DCE, as HDI has done here.

Furthermore, the proper interpretation of 10 C.F.R. § 50.75(e)(1)(i) is borne out in agency precedent. Multiple NRC safety evaluations of various licensing actions have approved the use of a 2% real rate of return in site-specific cost estimates for applicants and licensees using the DECON method.[86] At bottom, NYS misreads the condition in the regulation as limiting its application to decommissioning that involves an "[extended] period of safe storage." But the word "extended" is not present in the regulation. And NYS identifies no basis to read into the regulation an additional uncodified word that would fundamentally alter its meaning, and identifies no health and safety rationale for why the 2% annual real rate of return should be disallowed for the DECON decommissioning approach. In essence, the State's core claim in Proposed Contention NY-1 is contradicted by the plain text of the regulation and the NRC's historical application thereof. Therefore, the contention lacks the support required by 10 C.F.R. § 2.309(f)(1)(v).

### B. The DCE Specifically Describes a Brief Period of Safe Storage

The State further claims that the DCE does not specifically describe a period of safe storage, as required by 10 C.F.R. § 50.75(e)(1)(i).[87] This assertion is mistaken. The PSDAR and DCE, both clearly describe a brief period of safe storage, consistent with the NRC's definition of

---

[86] *See, e.g.*, Pilgrim License Transfer SER; Oyster Creek Exemption Issuance (June 20, 2019) (ML19112A318); Zion License Amendment Safety Evaluation Report (May 4, 2009) (ML090930063) ("Zion License Amendment SER").

[87] Petition at 7.

DECON. For example, the DCE breaks down the DECON process into periods consistent with NUREG/CR-5884 and NUREG/CR-6174.[88] Period 3 is explicitly called "Safe Storage Operations."[89] It further describes this limited period as follows:

> Since the DECON method will be used, the activities in this period only include preparations for and conduct of IP2 & 3 fuel movement to an on-site dry fuel storage facility (IP1 fuel is already stored on the ISFSI). This period concludes once all the spent nuclear fuel has been removed from the SFPs and placed into long term storage at the ISFSI.[90]

It also goes on to list the activities that will occur in this period of "Safe Storage Operations."[91] In other words, the DCE identifies the limited period of safe storage and *specifically describes* the period of safe storage as required by 10 C.F.R. § 50.75(e)(1)(i), and therefore the DCE satisfies all regulatory requirements for assuming an annual two percent real rate of return on nuclear decommissioning trust monies through the projected decommissioning period. Because the allegedly-missing information is in fact present in the DCE, the State's claim is unsupported and fails to demonstrate a genuine dispute.

* * *

In summary, Proposed Contention NY-1 is 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)(v) and (vi), and therefore should be denied as inadmissible.

---

88 DCE at 55-56.

89 *See, e.g.*, *id.* at 55.

90 *Id*.

91 *Id*.

## V. PROPOSED CONTENTION NY-2 (COST ESTIMATES) IS INADMISSIBLE

In Proposed Contention NY-2, NYS alleges that the DCE underestimates several costs related to license termination, spent fuel management, and site restoration. More specifically, NYS asserts:

> The Holtec LLCs fail to show adequate decommissioning financial assurance and/or adequate funding for spent nuclear fuel management in violation of 10 C.F.R. §§ 50.33(f) and (k)(1), 50.40(b), 50.54(bb), 50.75(b)(1) and (e)(1)(i), 50.80(b)(1)(i), 50.82(a)(8)(vii), and 72.30(b) because HDI's PSDAR and decommissioning cost estimate underestimate license termination, site restoration, and spent fuel management costs.[92]

Proposed Contention NY-2 is comprised of nine purported "bases"—essentially sub-contentions—which NYS asserts collectively demonstrate an admissible contention. For the reasons detailed below, these sub-contentions, individually and connectively, fail to identify an admissible basis for a contention.

As a preliminary matter, a discussion of the multiple layers of protection against potential negative impacts to NDTs from potential unexpected costs is instructive. First, the NRC fully recognizes that cost estimates are precisely that—*estimates*. Indeed, the Commission imposes a *lower* standard of "reasonable assurance" on cost predictions than it does on safety issues.[93] "The Commission will accept financial assurances based on *plausible assumptions and forecasts*, even though the possibility is not insignificant that things will turn out less favorably than expected."[94] In other words, the NRC's requirements for decommissioning financial assurance explicitly contemplate the possibility of unforeseen costs. Accordingly, the broader framework

---

92 Petition at 8.

93 *Seabrook*, CLI-99-6, 49 NRC at 221-22 (emphasis added).

94 *Id*.

for decommissioning financial assurance contemplates *multiple layers* of protection that safeguard against negative impacts to NDTs from potential future cost adjustments that could materialize as a decommissioning project progresses ("Layers of NDT Protection").

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* of the Layers of NDT Protection. The second demonstration is required because, otherwise, there would be no material impact on the NDT.[95] The various Layers of NDT Protection are briefly described below.

1. Contingency: The first Layer of NDT Protection is the contingency allowance in the estimate itself. In fact, NRC guidance explicitly describes this as an "allowance for unexpected costs."[96] Here, HDI's DCE includes a robust 18% contingency (and 25% for ISFSI decommissioning).[97] This value was calculated using risk modeling software to quantitatively evaluate the integrated impact of uncertainty and discrete risk events on the project objectives, baseline schedule and costs using a risk model for the "85% probability or level of confidence."[98] (In other words, more than a "plausible assumption.") This contingency value includes uncertainty in "[e]xpected site conditions (physical and radiological)."[99]

2. NDT Surplus: Another Layer of NDT Protection is provided by any surplus in the NDT *above any beyond* the collective sum of the estimated costs (based on plausible assumptions) plus the contingency cushion (calculated using risk-modeling software).[100] Here, HDI's DCE shows that a combined total of more

---

95 *Oconee*, CLI-99-11, 49 NRC at 333-34 (quoting Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,172 (Aug. 11, 1989)) (To be material, a contention must raise an issue that could "make a difference in the outcome of the licensing proceeding.").

96 NRC, Regulatory Guide 1.202, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors" at 10 (Feb. 2005) (ML050230008) ("RG 1.202").

97 DCE at 95.

98 DCE at 93.

99 *Id*. *See also generally infra* Part V.B (explaining that Basis B for Proposed Contention NY-2, challenging HDI's contingency factor, is inadmissible).

100 *See also Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-19-11, 91 NRC __, __ (Dec. 17, 2019) (slip op. at 27) (noting the safeguarding effect of a surplus, albeit in the context of a motion to stay).

than $263,000,000 is expected to remain in the NDTs after the completion of decommissioning at IPEC.[101]

3. Licensee Reporting: A further Layer of NDT Protection is found in the licensee's obligation to submit annual reports. More specifically, licensees in decommissioning are obligated by law to submit to the NRC, every year, an *updated* estimate of the costs to complete decommissioning and to manage SNF until DOE takes title and possession of it.[102] To the extent any unexpected costs might materially alter original cost estimates, those changes would be captured in these mandatory reports. Licensees also are required to notify the NRC in writing, with a copy to the affected state, of any changes to any actions in the PSDAR "that significantly increase the decommissioning cost."[103]

4. Alternate Funding Mechanism: Yet another Layer of NDT Protection is provided in this particular case. As noted in the DCE, "[i]f the funding assurance demonstration shows that the NDTs are not sufficient, then an alternate funding mechanism allowed by 10 CFR 50.75(e) . . . will be put in place."[104]

5. Ongoing NRC Oversight: Finally, the NRC's ongoing regulatory oversight is an additional Layer of NDT Protection capable of ensuring adequate funding throughout the duration of the decommissioning project.[105] Indeed, the NRC has a rigorous and comprehensive regulatory regime for that very purpose. The NRC can mandate that the licensee provide "additional financial assurance to cover the estimated cost of completion."[106] The NRC also has authority to restrict withdrawals from the NDT that could reduce it "below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise" or inhibit the licensee's ability to "ultimately release the site and terminate the license."[107] As the Commission has held, these strict requirements "provide reasonable assurance that adequate funds will remain to complete decommissioning by requiring [the licensee] and the Staff to monitor

---

101 DCE at 100-05.

102 *See* 10 C.F.R. §§ 50.82(a)(8)(v), (vii).

103 10 C.F.R. § 50.82(a)(7).

104 DCE at 106. *Accord Pilgrim*, CLI-19-11, 91 NRC at __ (slip op. at 28 & n.87). The State's claim in Proposed Contention NY-3 that the Holtec LLCs may be unable to provide additional funding is meritless for the many reasons discussed *infra* in Part VI.

105 *See generally* 10 C.F.R. §§ 50.82(a). *See also Pilgrim*, CLI-19-11, 91 NRC __ (slip op. at 27) (describing the NRC's oversight process and noting that the NRC could take actions up to and including revoking the exemption, if necessary, to prevent negative impacts to the NDT).

106 10 C.F.R. § 50.82(a)(vi).

107 10 C.F.R. § 50.82(a)(8)(i)(A)-(C).

> the projected cost of decommissioning and available funding and ensure more funding is available as needed."[108]

Individually and collectively, the State's Bases A through I fail to demonstrate (with adequate support) *either* that the DCE is premised on entirely implausible assumptions *or* that the speculative underestimations postulated by the State will defeat *all* of the Layers of NDT Protection. And they certainly do not demonstrate *both*. Thus, Proposed Contention NY-2 fails to satisfy the Commission's contention admissibility criteria in 10 C.F.R. § 2.309(f)(1) in multiple respects, as detailed below.

### A. Basis A (Exemption Request) Is Inadmissible

In Basis A, NYS claims that the Holtec LLCs cannot rely on a regulatory exemption to use NDT funds for spent fuel management and that HDI's DCE is therefore "speculative and unreliable."[109] Specifically, NYS claims:

> Because the PSDAR and cost estimate impermissibly rely on regulatory exemptions the Holtec LLCs have neither sought nor received, the Holtec LLCs fail to demonstrate their financial qualification or show adequate funding for spent fuel management and ISFSI decommissioning as required under 10 C.F.R. §§ 50.33(f), 50.54(bb), 50.82(a)(8)(vii), and 72.30(b).[110]

As the State points out, HDI's DCE assumes that the NRC will grant the Exemption, permitting the use of NDT funds for spent fuel management and site restoration activities.[111] But NYS claims that this assumption is not reasonable because (when the State filed its Petition) HDI had

---

[108] *Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99, 118 (2016); *see also Exelon Generation Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-19-6, 90 NRC __, __ (June 18, 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).

[109] *Id.* at 13.

[110] *Id.* at 12.

[111] Petition at 12-13; DCE at 50.

not yet filed the Exemption Request with the NRC.[112] The State's position is that the Application is required by law to assume the Exemption Request will be *denied*, and must demonstrate financial assurance without relying on funds in the NDTs.[113] But the State's reasoning is fundamentally flawed.

As a preliminary matter, HDI filed its Exemption Request with the NRC on February 12, 2020, the same day the State filed its Petition.[114] Thus, the State's argument regarding the filing of the Exemption Request is moot.[115] Moreover, the State's claim that the DCE cannot assume the Exemption Request will be granted improperly disregards the correct legal standard applicable to demonstrations of financial assurance. And the State's other various assertions in Basis A, including its demand that the Exemption Request be adjudicated in this license transfer proceeding, and that the NRC "mandate" that recoveries from DOE's breach of the Standard Contract be deposited in the NDTs, are immaterial and beyond the scope of this proceeding. For all of these many reasons, Basis A fails to satisfy 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi) and should be rejected.

1. <u>As a Matter of Law, Applicants May Rely on Plausible Assumptions and Forecasts to Demonstrate Financial Assurance</u>

In Basis A, NYS claims that 10 C.F.R. §§ 50.33(f), 50.54(bb), 50.82(a)(8)(vii), and 72.30(b) require the Holtec LLCs to show that they are "financially qualified" to hold the Licenses and establish adequate financial assurance for spent fuel management and site

---

112 Petition at 13, 15.

113 *Id*.

114 *Compare* Exemption Request *with* Petition (both filed Feb. 12, 2020).

115 *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 383 (2002) ("Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant…the contention is moot.") (citations omitted).

restoration. NYS also claims that, for a license transfer applicant to establish adequate financial assurance, these same regulations require HDI, Holtec IP2, and Holtec IP3 to show "that they have the independent means to fund spent fuel management activities and decommission the Indian Point ISFSI . . . *without resort to the funds currently in the Indian Point nuclear decommissioning trusts*" because the NRC has not yet issued "a final, non-appealable order granting" the Exemption Request.[116]

But the State fails to identify any support for its alleged prohibition on a license transfer applicant relying on reasonable assumptions regarding future economic conditions. Nor is there any such authority. In fact, the State's claim is contrary to controlling law. As the Commission has made clear, petitioners "cannot insist that Applicants provide the impossible: absolutely certain predictions of future economic conditions."[117]

The Commission has explained that its standard of review for financial qualifications:

> is less than the extremely high assurance the Commission requires regarding the safety of reactor design, construction, and operation. The Commission will accept financial assurances based on *plausible assumptions and forecasts*, even though the possibility is not insignificant that things will turn out less favorably than expected. Thus, *the mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance*.[118]

The above shows that there is no basis for the State's claim that NRC rules prohibit Applicants from relying on a plausible assumption that the Exemption Request will be granted. Thus, the State's claim is unsupported as a matter of law, immaterial, and fails to demonstrate a

---

116 Petition at 13-15 (emphasis added). NYS also argues in Proposed Contention NY-3 that, even if the NRC grants the Exemption Request, the Applicants may not solely rely on NDT funds for a demonstration of financial qualifications. This assertion is incorrect for the many reasons discussed *infra* in Part VI.

117 *Seabrook*, CLI-99-6, 49 NRC at 221.

118 *Id.* at 222 (emphasis added).

genuine dispute with the Application on a material issue of law or fact, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi). And if NYS is advocating for stricter regulatory requirements, then Basis A is also outside the scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii), as an impermissible challenge to NRC rules and regulations, which do not require what the State demands.[119]

2. Applicants' Assumption That the Exemption Request Will Be Granted Is Entirely Plausible

Even though Basis A is inadmissible because its disregards settled law, the State's claim is also inadmissible because, when the correct legal standard is applied, the LTA satisfies that standard. More specifically, the DCE assumes the Exemption Request will be granted; and that assumption is entirely plausible. As HDI points out in its Exemption Request, the NRC has issued similar exemptions to ENOI for Vermont Yankee;[120] to Duke Energy Florida, Inc. for Crystal River Unit 3;[121] to Dominion Energy Kewaunee, Inc. for Kewaunee Power Station;[122] to Exelon Generation for Oyster Creek Nuclear Generating Station;[123] and to ENOI for Pilgrim Nuclear Power Station.[124] NYS does not even acknowledge the NRC's approval of these other

---

119 10 C.F.R. § 2.335(a).

120 Letter from NRC to ENOI, "Vermont Yankee Nuclear Power Station - Exemptions from the Requirements of 10 CFR Part 50, Sections 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv)" (June 17, 2015) (ML15128A219).

121 Letter from NRC to Duke Energy Florida, Inc., "Crystal River Unit 3 Nuclear Generating Plant - Exemptions from the Requirements of 10 CFR Part 50, Sections 50.82(a)(8)(i)(A) and 50.75(h)(2)" (Jan. 26, 2015) (ML14247A545).

122 Letter from NRC to Dominion Energy Kewaunee, Inc., "Kewaunee Power Station - Exemptions from the Requirements of 10 CFR Part 50, Section 50.82(a)(8)(i)(A) and Section 50.75(h)(1)(iv)" (May 21, 2014) (ML13337A287).

123 Letter from NRC to Exelon Generation Co., LLC, "Oyster Creek Nuclear Generating Station – Exemptions from the Requirements of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv)" (Oct. 19, 2018) (ML18227A025).

124 Letter from NRC to ENOI, "Pilgrim Nuclear Power Station Plant - Request for Exemption from 10 CFR 50.82(a)(8)(i)(A)" (July 22, 2019) (ML19162A334).

exemption requests, much less attempt to distinguish them from HDI's Exemption Request for IPEC.[125] Simply put, HDI has a good-faith basis to assume the Exemption Request will be granted; and NYS provides no support for its contrary assertion.

3. The Merits of the Exemption Request Are Outside the Scope of This Proceeding and the State's Contrary Claim Is Unsupported

NYS claims that HDI, regarding its Exemption Request, has somehow "ceded jurisdiction to an Atomic Safety and Licensing Board (ASLB) on the question [of] whether they are in fact entitled to such an exemption."[126] This is an incorrect statement of the law— the *merits* of the Exemption Request, which was submitted for NRC review and approval in an entirely separate licensing request—do not come within the scope of this license transfer proceeding simply because the LTA is simultaneously pending.

In a Vermont Yankee license amendment proceeding, Vermont sought to challenge a license amendment request by raising issues tied to Entergy's PSDAR and its exemption request to use NDT funds for certain spent fuel management costs. Entergy and NRC staff objected and argued that both the PSDAR and exemption request were outside the scope of the proceeding.[127] The ASLB in that proceeding ruled that:

> the merits of the exemption request itself are also outside the scope of this proceeding. The Board will consider the PSDAR and exemption request only insofar as they can serve as factual support for Vermont's challenge to Entergy's planned uses for the decommissioning trust fund. In no event will the Board consider any arguments regarding the correctness of the NRC Staff's decision to grant those exemptions.[128]

---

125 Petition at 12-17.

126 *Id.* at 13.

127 *Entergy Nuclear Vt. Yankee, LLC* (Vt. Yankee Nuclear Power Station), LBP-15-24, 82 NRC 68, 78 (2015), *vacated as moot*, CLI-16-8, 93 NRC 463 (June 2, 2016).

128 *Id*. at 84.

The Board's rationale for that decision applies here as well. The Exemption Request, contrary to the State's claim, is outside the scope of this LTA proceeding, and Applicants have not "ceded jurisdiction" over the merits of the Exemption Request to an ASLB Board. Moreover, the State fails to cite any legal authority for its claim to the contrary. Thus, Basis should be rejected for these additional reasons.

4. NYS's Demand That NRC Mandate the Deposit of DOE Recoveries Into the NDTs Is Outside the Scope of This Proceeding, Unsupported, Immaterial, And Does Not Raise a Genuine Dispute with the Application

The NDT cash flow analysis in HDI's DCE *conservatively* does not take credit for any monies that may be recovered from DOE in future spent fuel litigation related to DOE's breach of the Standard Contract.[129] However, NYS asks the Commission to "mandate" that the Holtec LLCs deposit any such recoveries into the NDTs.[130] But, NYS provides no basis for suggesting that the NRC even has the regulatory authority to "mandate" how any recoveries from private litigation in federal court are used or disbursed. Thus, the State's request is beyond the NRC's jurisdiction and outside the scope of this proceeding.

Moreover, the State claims that its demand is necessary to satisfy "the additional financial assurance required under 10 C.F.R. §§ 50.82(a)(8)(vi) and (vii)(C)."[131] But these regulations impose obligations on licensees to provide funding in the *future* if unforeseen shortfalls in funding for decommissioning and spent fuel management activities *actually materialize*. But that is not the case here. And the State provides no support for a suggestion that these regulations somehow impose further obligations on the Applicants to demonstrate funding *above*

---

129 *See* LTA at 18.

130 Petition at 17.

131 *Id*.

*and beyond* that required to demonstrate financial assurance. Thus, Basis A is beyond the scope of this proceeding, immaterial, unsupported, and fails to dispute the Application for this additional reason.

* * *

In summary, Basis A does not satisfy the admissibility criteria in 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi), and therefore does not support the admissibility of Proposed Contention NY-2.

### B. Basis B (Contingency) Is Inadmissible

In Basis B, NYS alleges that HDI's DCE fails to consider the "substantial likelihood" that HDI will discover additional radiological and non-radiological contamination at IPEC after HDI begins decommissioning work. Specifically, NYS alleges:

> Because the PSDAR and cost estimate fail to account for the likely existence of and cost to remediate additional radiological and non-radiological contamination, the Holtec LLCs fail to show financial qualification or adequate decommissioning funding assurance as required under 10 C.F.R. § § 50.33(f) and 50.75(b) and (e)(1)(i).[132]

NYS claims that HDI failed to "thoroughly assess the extent of on-site contamination" because it will only conduct a site characterization after the license transfer.[133] And as a result, the State claims, HDI's PSDAR and DCE did not address "the likely need for additional, expensive remediation of radiological and non-radiological hazardous substances . . . beneath and surrounding the plant's built infrastructure."[134] The State also claims that because HDI did not thoroughly assess the site, its DCE is insufficient. The State further claims that HDI either

---

132 *Id*.

133 *Id.* at 18-19.

134 *Id.* at 18.

excluded these costs from the DCE or, if HDI included them as part of the eighteen percent contingency allowance, that amount is insufficient to remediate yet-to-be-discovered contamination at IPEC.[135]

Basis B fundamentally presumes that: (1) a large amount of unknown and undiscovered contamination exists at IPEC; (2) the degree of that contamination could have been ascertained by HDI had it "thoroughly assessed" on-site contamination; and (3) remediation of this contamination will far exceed the DCE. This is purely speculative and differs from what the State well knows—that IPEC is one of, if not the most, studied and monitored nuclear generation sites in the United States in terms of radiological contamination. And as a result of this extensive monitoring, which has been ongoing for over 15 years, volumes of public documentation exist on the nature and extent of contamination at IPEC, including in site groundwater.[136] HDI cites to specific records it reviewed and 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*."[137]

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 (or, for that matter, any large industrial property), HDI specifically

---

135 *Id.* at 19-20.

136 *See, e.g.*, IPEC ENVIRONMENTAL AND GROUNDWATER REPORTS, http://www.safesecurevital.com/resources/reports.html ("IPEC Reports Website"). The State is well aware of these reports, from which the attachments to the State's Petition were sourced. *See* Petition, Attachs. A-C (noting they were derived from GZA, "IPEC Quarterly Long-Term Groundwater Monitoring Report," Report No. 43, at 2-1 (Dec. 19, 2019) ("GZA Report 43"), *available at* http://www.safesecurevital.com/pdf/19-12-19.pdf (Q2 2019 Report).

137 DCE at 63 (emphasis added).

accounts for this possibility in its DCE and its conservative contingency allowance. Even so, the State's concern that undiscovered contamination is so extensive and will be so expensive to remediate that the NDTs will be exhausted is completely unsupported. There also is no basis for concluding that taxpayers will shoulder the cost of cleanup. The State's unsupported conclusion overlooks, and fails to engage with, the important safeguards provided by the other Layers of NDT Protection, including robust and continuing oversight and the expected NDT surplus.[138]

For all of the above reasons, Basis B is speculative and unsupported and does not raise a genuine dispute with the Application. For these reasons, Basis B does not supply an admissible basis for Proposed Contention NY-2.

1. The Extent of Groundwater Contamination at IPEC Is Well Studied, Well Understood, Extensively Documented, and Publicly Available, and the State's Claim of Likely Additional Substantial Contamination Is Unsupported

In Basis B, NYS claims that the extent of tritium and strontium-90 contaminated groundwater at the site is unknown and yet to be determined.[139] But the State offers no reliable support for this claim.[140] Nor could it, because as the State is aware by virtue of Entergy's ongoing work with the New York Department of Environmental Conservation ("NYSDEC"), the groundwater contamination at IPEC has been thoroughly investigated and continually monitored and mapped for almost 15 years, and much of the data and conclusions from this monitoring is

---

138 *See supra* Part V (discussing the Layers of NDT Protection).

139 Petition at 21-23.

140 NYS cites the Declaration of Timothy B. Rice in support of its assertion that HDI has not performed a "rigorous site characterization study." *Id.* at 18. Mr. Rice references the 2008 Hyrdrogeologic Site Investigation (*infra* n.142), and "Hydrogeologic Site Investigation data" as support for his claim that "known areas of fission product contamination . . . have not yet been well characterized." Rice Decl. at 10-11. The reports and data Mr. Rice references, however, show the opposite of what he claims—that the extent of this contamination is well characterized and well understood.

publicly available.[141] While the possibility exists that other groundwater contamination could be found once demolition of site structures occurs, the publicly available reports show that there is no basis for the State's claim that the extent of site groundwater contamination is unknown or not understood.

As the State is aware, between September 2005 and September 2007, an environmental contractor hired by Entergy (GZA GeoEnvironmental, Inc. ("GZA")) conducted a comprehensive hydrogeological site investigation at IPEC.[142] This investigation included "approximately 60 shallow and deep, overburden and bedrock, single and multi-level instrument installations, as well as footing drain and man hole sampling points, which encompass approximately 150 individual sampling intervals."[143] And GZA installed over 35 wells that were "strategically located . . . to determine if specific tanks, pools[,] or sumps are potential sources of leakage."[144]

GZA drafted a detailed report of its investigation, and Entergy submitted this report to the NRC in January 2008.[145] As a result of GZA's hydrogeological site investigation, Entergy implemented a long-term monitoring program ("LTMP") at IPEC to monitor groundwater to detect and characterize current *and future* contaminant migration.[146] As part of this LTMP, GZA performs quarterly groundwater testing and maintains a network of 22 long-term monitoring

---

141 *See* IPEC Reports Website (providing quarterly groundwater reports from Sept. 2013 to Dec. 2019).

142 GZA, "Hydrogeologic Site Investigation Report, Indian Point Energy Center, Buchanan, New York" (Jan. 7, 2008) (ML080320540) ("GZA HSI Report").

143 GZA, "Memorandum – Synopsis of Long Term Monitoring Program Plan Bases," at 1 n.4 (Jan. 25, 2008) (ML080290204) ("GZA LTMP Memo").

144 Entergy, "Indian Point Groundwater Investigation," at 6 (Oct. 30, 2006) (ML101390123).

145 GZA HSI Report.

146 GZA LTMP Memo at 1.

transducers and data loggers, which record groundwater levels as the site, and takes quarterly water samples for radionuclide analysis.[147] The results of GZA's quarterly sampling and analysis are then made publicly available on an Entergy-sponsored public website.[148]

The breadth of the LTMP and the publicly available reports contradicts the State's claim that the extent of groundwater contamination at the site is unknown. As the public reports make clear, the scope and extent of the tritium and strontium contamination are understood and are continually monitored. Indeed, the extensive monitoring efforts to date reveal that the *opposite* of the State's claim is taking place. As the most recent quarterly reports make clear, both tritium and strontium levels and plume size *continue to decrease* as a result of Entergy's groundwater extraction system and natural attenuation.[149]

Against the weight of this voluminous publicly available information, the State claims that the scope and extent of groundwater contamination are still unknown.[150] But the State provides no support for this claim and simply provides a brief history of the groundwater contamination discoveries at IPEC.[151] As shown above, these historical events have not only been previously identified, they have been extensively studied and the results are well documented and contemplated in the DCE. The State, however, tries to use this history to infer that more groundwater contamination exists or that the extent of the contamination is larger—contrary to the data in the monitoring reports. But the State offers no support for its claims, and

---

147 GZA Report 43 at 2-1.

148 *See* IPEC ENVIRONMENTAL AND GROUNDWATER REPORTS, http://www.safesecurevital.com/resources/reports.html. Entergy's testing and monitoring program is also consistent with industry guidance developed by the Nuclear Energy Institute. *See* NEI-07-07, "Industry Ground Water Protection Initiative – Final Guidance Document" (Aug. 2007) (ML072600295).

149 *See e.g.*, GZA Report 43 at 3-16 to 3-17, 4-1 to 4-2. *See also generally* IPEC Reports Website.

150 Petition at 18-23.

151 *Id.* at 21-24; *see also* Rice Decl. at 7-13.

the facts reveal the opposite is true. Thus, its unsupported claims are not a basis for an admissible contention.

2. The Extent of Non-Ground Water Contamination at IPEC Is Also Well Studied, Well Understood, Extensively Documented, and Publicly Available, and the State's Claim of Likely Additional Substantial Contamination is Unsupported

In Basis B, NYS also claims that IPEC has a "lengthy history" of non-groundwater "radiological and non-radiological contamination—the full extent of which is presently unknown."[152] NYS claims that "HDI has not performed the rigorous site characterization necessary to formulate an accurate remedial plan and to accurately estimate remediation costs."[153] But the State offers no reliable support for this claim. Nor could it, because as the State is aware, there are extensive records and reports documenting non-radiological release events at IPEC which, as the PSDAR establishes, were reviewed by HDI. For example, known and potential radiological and non-radiological contamination at the site is extensively cataloged in the HSA.[154] HDI reviewed the draft HSA in connection with the preparation of its DCE.[155]

Consistent with NRC guidance, Entergy retained Radiation Safety & 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."[156] As part of its preparation of the HSA, RSCS reviewed "[h]istorical information

---

152 Petition at 18.

153 *Id*.

154 Historical Site Assessment for Indian Point Energy Center, Technical Support Document (TSD) No. 19-002, Rev. 2 (Apr. 30, 2019) ("HSA").

155 DCE at 63.

156 HSA at 15.

. . . to identify areas where contamination existed, remains, or *has the potential to exist*."[157] 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.[158]

The HSA identifies potential radiological and non-radiological contamination (including asbestos, mercury, lead, and PCBs).[159] The HSA discusses known and potential radiological and non-radiological contamination in the sewage collection and storm drain systems.[160] The HSA also identifies known and potential radiological and non-radiological impacts in buildings and structures, interior and exterior storage areas, and transformer yards.[161] While the possibility exists that other areas of contamination could be found once demolition of site structures occurs, the HSA document reviewed by HDI, which evaluated areas of interest for potential impacts, shows that there is no basis for the State's claim that the extent of contamination is unknown or not understood, or not accounted for in the DCE.

For example, NYS claims that "spill records indicate that there have been approximately 258 petroleum spills at Indian Point since 1986" and that 65 were not fully remediated likely because the spill was close to "critical and/or immovable infrastructure."[162] But the HSA documents these releases and includes a list of spill reports submitted to NYSDEC from 1987 to the present.[163] NYS also cites transformer fires in 2010 and 2015 that caused non-radiological

---

157 *Id.* (emphasis added).

158 *Id.* at 15-16.

159 *Id.* at 62-66.

160 *Id.* at 67-69.

161 *Id.* at 70-319.

162 Petition at 23.

163 *See* HSA at 35-36, 320-22.

contamination at the site.[164] But the HSA documents both of these events, including the release of firefighting foam and oil that occurred during those events, and the resulting cleanup.[165] NYS cites no rational basis—regulatory or otherwise—as to why or how HDI's review of the extensive site assessments conducted to date, which were inputs to the development of the PSDAR and DCE, is somehow insufficient for this stage of the pre-decommissioning process.

The above shows that historical contamination at the site is well documented and studied. With access to that information in its due diligence, HDI reasonably accounted for known and unknown contamination at the site in its DCE. The State's claims are thus unsupported and are not a basis for an admissible contention.

3. HDI's Review of Records and the Historical Site Assessment Show That HDI's DCE Reasonably Reflects the Cost To Remediate Radiological and Non-Radiological Contamination

NYS also claims that HDI's DCE is insufficient because HDI is deferring a full site characterization until after the license transfer is complete.[166] To begin with, NYS cites no regulatory requirement to conduct the level of site characterization it wants now in support of a PSDAR or DCE. This is unsurprising because there is none, as discussed below. The State also fails to acknowledge the extensive documents HDI reviewed as part of its due diligence and as referenced in the DCE. As noted, *supra*, HDI explains that it reviewed the "IP1, 2 & 3 decommissioning records required by 10 CFR 50.75(g), and the draft [HSA] prepared for ENOI."[167]

---

164 Petition at 23-24.

165 HSA at 36-37.

166 Petition at 18, 20.

167 DCE at 63. And HDI makes clear that the "site characterization activities" are to "supplement site historical knowledge and the IP1, 2 & 3 HSA." PSDAR at 10.

Based on its review of these documents, HDI concluded that "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."[168] By ignoring HDI's review of these documents, NYS fails to raise a genuine dispute with the Application.[169]

As HDI states, it reviewed documents that Entergy, as the current licensee, is required by Section 50.75(g) to maintain.[170] 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. . . .
>
> (3) Records of the cost estimate 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.[171]

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

---

168 DCE at 63.

169 While the State faults HDI for not conducting a full site characterization study before submitting its DCE, and complains that "HDI plans to characterize site contamination *after* the licenses transfer" (*see* Petition at 18 (emphasis in original)), it is not even clear that the type of characterization study NYS seeks could be accomplished now, while the reactors are currently operating.

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

171 10 C.F.R. § 50.75(g)(1)-(3).

"locations of possible inaccessible contamination."[172] And as HDI states, it considered these documents as part of its due diligence, and they are a basis for its cost estimate.[173]

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"[174] and confirm that "major factors that could affect the cost" have been considered.[175] 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 NYS claims is necessary now.[176] And even if additional contamination were found and required remediation, the Layers of NDT Protection will ensure adequate funding is maintained.[177] Moreover, the PSDAR and DCE are entirely consistent with the NRC's MARSSIM guidance, which explains that the full site characterization survey is an intermediate step that occurs later in the decommissioning process.[178]

---

172 *Id.* at (1)-(2).

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

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

175 *Id*. at 13.

176 *Id.* at 26.

177 *See supra* Part V (discussing the Layers of NDT Protection).

178 *See* NUREG-1575 §§ 2.4, 5.3.

By not acknowledging that HDI reviewed and considered these extensive historical records and NRC guidance while preparing the DCE, the State's claims related to the sufficiency of the DCE are unsupported and do not raise a genuine dispute with the Application.

4. The State's Claims About Insufficient Contingency Costs Are Unsupported and Do Not Raise a Genuine Dispute with the Application

NYS claims that "HDI never describes which risks or uncertainties, if any, are accounted for in the uncertainty allowance or risk allowance categories."[179] But this ignores the actual discussion of uncertainty in the DCE in which HDI discusses "estimate uncertainty" as a function of various factors including "expected site conditions (physical and radiological)," among others.[180] HDI also discusses its risk modeling and use of a Monte-Carlo risk modeling tool (Primavera Risk) in developing the contingency. HDI used the output, along with expert judgment, to "evaluate the effectiveness of risk response plans, identify and prioritize key risk drivers, [and] quantify schedule and cost reserves based on desired levels of confidence."[181] HDI also discussed qualitative and quantitative risk analysis and its use of software to "determine risk and contingency levels."[182] The State appears to object to the fact that HDI did not list in the DCE each discrete risk and contingency analyzed under this process, but there is no regulatory requirement for HDI to do so—and NYS cites none.[183] Rather, the NRC only looks for a "description of how the contingency costs are calculated," which HDI provided.[184]

---

179 Petition at 19.

180 DCE at 93.

181 *Id*.

182 *Id.* at 94-95.

183 Petition at 20-21.

184 NUREG-1713 at 27.

The State also claims—without support—that HDI's contingency factor of 18 percent excludes the cost of remediating currently unknown contamination found during decommissioning.[185] But as discussed above, the current contingency factor considers these potential costs. The State simply appears to conflate the concept of project "scope" with the concept of project "uncertainty."[186] For example, as noted in the PSDAR, "[a] major component of the decommissioning work *scope* for IP1, 2 & 3 is the packaging, transportation, and disposing of contaminated/activated equipment, piping, concrete, and soil."[187] But if radiological site conditions ultimately differ from what is expected now, and those differences require an additional volume of soil (for example) to be packaged, transported, and disposed of, this would not constitute a change in project *scope*; but rather it would be a change in "expected site conditions (physical and radiological)," the uncertainty of which was explicitly captured in HDI's current contingency factor.[188]

HDI's 18 percent contingency factor is also 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.[189] Moreover, HDI's 18 percent contingency factor for IPEC is more than its contingency for Oyster Creek Nuclear Generating Station (15

---

185 Petition at 20 (citing but misreading "Preliminary Decommissioning Cost Analysis for the Indian Point Energy Center, Unit 3," at 6-7 (Dec. 2010) (ML103550608)).

186 *Cf. Seabrook*, CLI-12-5, 75 NRC at 312 (noting a petitioner's "ironclad obligation" to review the application and relevant support *thoroughly and accurately*); *Ga. Tech*, LBP-95-6, 41 NRC at 300 (a petitioner's "imprecise reading" of the application is insufficient basis for a contention).

187 PSDAR at 12 (emphasis added).

188 DCE at 93.

189 Letter from J. Pollock, Entergy, to NRC Document Control Desk, "Unit 1 & 2 Program for Maintenance of Irradiated Fuel and Preliminary Decommissioning Cost Analysis in accordance with 10 CFR 50.54(bb) and 10 CFR 50.75(f)(3)," Enclosure 2, "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. 2010) (ML103550608).

percent) and Pilgrim Nuclear Power Station (17 percent).[190] This larger contingency at IPEC accounts for, in part, potential unforeseen contamination—exactly what a contingency is intended to do.

NYS also points to the decommissioning at Connecticut Yankee, where "unforeseen radiological contamination" required additional costly remediation.[191] But it is unclear how the experience at Connecticut Yankee is informative in the discussion of potential groundwater contamination at IPEC—because the State fails to provide a factual comparison between the two sites. And when one actually considers relevant facts, the State's arguments appear even more specious. For example, the soil remediation at Connecticut Yankee concluded in December 2005, before NEI's groundwater protection initiative began,[192] and before the extensive site characterization and groundwater monitoring was conducted at IPEC. Based on this information alone, it is reasonable to assume that site conditions at IPEC are much better understood than at Connecticut Yankee.

But according to the State, a similar discovery at IPEC could also lead to substantial cost increases, and so the NRC should require "the provisioning of additional financial assurance as a condition of approving the license."[193] As noted above, however, NYS's claim on the potential discovery of new or more significant contamination is speculative and ignores the past and

---

190 Letter from P. Cowan, HDI, to NRC Document Control Desk, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Oyster Creek Nuclear Generating Station," Revised DCE at 45 (Sept. 28, 2018) (ML18275A116); Letter from P. Cowan, HDI, to NRC Document Control Desk, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Pilgrim Nuclear Power Station," Revised DCE at 41 (Nov. 16, 2018) (ML18320A040).

191 Petition at 26.

192 *See* NEI 07-07.

193 Petition at 26.

ongoing monitoring at the site. But even so, the Layers of NDT Protection, including an expected surplus of $263 million and ongoing NRC oversight will ensure adequate financial assurance throughout the decommissioning process.[194] The State's suggestion that additional financial assurance is required *now*, because of the experience at Connecticut Yankee, lacks any foundational basis.

For the above reasons, Basis B is unsupported and fails to show a genuine dispute with the Application.

### C. Basis C (Site Restoration) Is Inadmissible

In Basis C, NYS alleges the DCE underestimates site restoration costs, because it does not account for purported obligations associated with certain agreements and non-NRC radiological standards. More specifically, NYS asserts:

> Because the PSDAR and decommissioning cost estimate fail to recognize or adequately account for the costs associated with stricter state-law site restoration requirements, the Holtec LLCs fail to demonstrate financial qualification or adequate decommissioning financial assurance as required under 10 C.F.R. §§ 50.33(f) and 50.75(b) and (e)(1)(i).[195]

For the reasons detailed below, this sub-contention fails to identify an admissible basis for a contention. As a general matter, the PSDAR and DCE fully comply with NRC regulations and guidance regarding the required level of detail for such documents. To the extent the State demands more than what is required by NRC regulations, it fails to identify a litigable issue. Furthermore, while Holtec and the State may engage in discussions regarding the appropriate site restoration requirements for the IPEC decommissioning project, Basis C asks the NRC to take

---

194 DCE at 100-05.

195 Petition at 27.

action on state administrative and regulatory matters and assign corresponding legal obligations to the Applicants.

In short, these issues are well beyond the NRC's statutory jurisdiction, and the State's arguments should be dismissed as outside the scope of the proceeding. Nevertheless, even if the NRC had jurisdiction, and even if stricter state law standards ultimately are applied to some elements of the decommissioning project, NYS fails to explain how the NDT could be negatively affected given the multiple Layers of NDT Protection discussed above, including conservatisms in cost estimates and contingency, as well as the ongoing requirement to *update* those estimates to reflect changed circumstances.[196]

Furthermore, NYS cites no quantitative support for its claim that the site restoration costs in the DCE are underestimated—much less that they are materially underestimated. In essence, NYS offers nothing more than unsupported *speculation* in this regard. And the State's other various claims—including its assertion that the Applicants will somehow disregard or ignore their legal and regulatory obligations—are variously unsupported, immaterial, out-of-scope, and fail to demonstrate a genuine dispute with the Application, contrary to 10 C.F.R. § 2.309(f)(1)(iii)-(vi). Accordingly, Basis C fails to support the admissibility of Proposed Contention NY-2.

1. The DCE and PSDAR Appropriately Describe Site Restoration Activities

The DCE explains that the estimated site restoration costs therein "are based on current and/or assumed . . . site restoration requirements."[197] And in radiological terms, the PSDAR explains that "the IPEC site will be decommissioned to meet the unrestricted release criteria

---

196 *See supra* Part V (discussing the Layers of NDT Protection).

197 DCE at 48.

found in 10 CFR 20.1402."[198] Beyond that, the PSDAR contemplates the removal of 3.3 million cubic feet of soil contaminated at "*very* low levels."[199] The DCE also notes that its assumed activities and estimation of costs, although driven by site-specific considerations, was informed by NRC guidance in NUREG/CR-5884 (which includes Appendix L, discussing site restoration activities and costs) and the site restoration activities and costs from seven decommissioned PWRs.[200] But NYS faults the PSDAR and DCE for not identifying any specific "state-law standards" that may fall within that scope.[201] However, the State points to no explicit requirement to do so. Nor is there one. As explained in further detail below in response to Basis D, the PSDAR and DCE are *summary-level documents* intended to provide a general overview of costs and activities.[202] And HDI's PSDAR and DCE are fully consistent with NRC guidance in this regard. Thus the State's claim is immaterial and fails to demonstrate a genuine dispute with the Application. Furthermore, to the extent NYS asserts the LTA (or the PSDAR or DCE) *must* include information about "state-law standards," it is seeking to impose requirements beyond those in NRC regulations. Thus, the State's argument also is an impermissible collateral attack on NRC regulations and therefore is outside the scope of this proceeding.[203]

---

198 PSDAR at 37.

199 *Id*. at 35.

200 DCE at 91.

201 Petition at 27.

202 *See infra* Part V.D.3.

203 Absent a waiver, which NYS neither requested nor obtained, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding." 10 C.F.R. § 2.335(a). This includes contentions that advocate stricter requirements than agency rules impose. *See, e.g.*, *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-6, 53 NRC 138, 159-60 (2001), *aff'd*, CLI-01-17, 54 NRC 3 (rejecting the petitioner's contention that a license renewal applicant was required to prepare a probabilistic risk assessment where NRC regulations did not require such an analysis).

The State further claims the PSDAR and DCE "fail[] to explain . . . what the [site restoration] work will actually entail."[204] But the State is mistaken. The DCE clearly explains that "[s]ite Restoration costs are those costs associated with conventional dismantling, demolition, and removal from the site of structures and systems after confirmation that radioactive contaminants have been removed."[205] The DCE also explains that packaging, transportation, and disposal related to demolition of the overpack assemblies are considered site restoration activities.[206] And the PSDAR contains an entire section titled "Site Restoration," which describes the activities as follows:

> During demolition, above-ground structures will be removed to a nominal depth of three (3) feet below the surrounding grade level. Characterization surveys will then be performed in the remainder of the below ground structures and any areas with activity exceeding established DCGLs [Derived Concentration Guideline Levels] will be removed. Final Status Surveys, including NRC verification surveys, will be conducted. Once the NRC approves the Final Status Surveys, the affected area(s) will be backfilled with suitable fill materials, graded, and appropriate erosion controls established. Site restoration activities will begin in non-radiological areas after demolition of buildings and structures outside the radiological controlled area. Final site restoration will be completed after ISFSI decommissioning and demolition is completed.[207]

Thus, contrary to the State's claim of omission—that the PSDAR and DCE "fail[] to explain what the [site restoration] work will actually entail"—the allegedly omitted information is in fact presented in the PSDAR and DCE. The State does not acknowledge or challenge this specific information, and identifies no requirement to do more. Thus, the State's claim is unsupported and fails to demonstrate a genuine dispute with the Application.

---

204 Petition at 27.

205 DCE at 60.

206 *Id.* at 65.

207 PSDAR at 13 (Section 2.4.10).

2. The State's Demand for Adjudication of Contractual Obligations and State Regulatory Requirements Is Outside the NRC's Jurisdiction

As noted above, the PSDAR explains that "the IPEC site will be decommissioned to meet the unrestricted release criteria found in 10 CFR 20.1402," and that 3.3 million cubic feet of soil with "*very* low levels" of contamination will be removed from the site.[208] However, Basis C cites various private agreements and state agency orders, standards, and guidance documents that purport to impose certain additional unrestricted release criteria and "site restoration obligations" on the Applicants.[209] These include the alleged legal obligation to remediate radiologically contaminated soils to a 10 mrem annual dose limit,[210] and to remediate the IPEC outfall structure.[211] In essence, the State asks that the NRC adjudicate these assertions and conclude, as a matter of law, that Applicants are bound to comply with the associated obligations (which are plainly inconsistent with NRC's regulations and requirements).[212] But these arguments raise issues far beyond the scope of this proceeding and, indeed, outside the NRC's jurisdiction altogether. The Commission has long declined to involve itself in interpreting private contracts or matters within the jurisdiction of other state or federal agencies.[213] And NYS identifies no good reason for the Commission to depart from its prudent and longstanding approach here. Accordingly, Basis C should be rejected as out-of-scope, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

---

208 *Id.* at 35, 37 (emphasis added).

209 Petition at 28-31.

210 *Id.* at 29.

211 *Id.* at 31.

212 *Compare* 10 C.F.R. § 20.1402 (establishing a criterion of 25 mrem for unrestricted release) *with* Petition at 29 (claiming the State's criterion is 10 mrem for unrestricted release).

213 *Vt. Yankee*, CLI-16-17, 84 NRC at 109 n.35 (citing *PPL Susquehanna LLC* (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-07-25, 66 NRC 101, 107 (2007) (denying an appeal claiming "that [the] NRC ought to concern itself with … matters within the jurisdiction of other state and federal agencies"); *Oyster Creek*, CLI-00-6, 51 NRC at 211 (clarifying that the proper forum for an argument regarding rate regulation is the FERC or a state board of public utilities)).

Furthermore, Holtec and its subsidiaries intend to pursue an agreement with the State regarding the decommissioning obligations and site cleanup standards applicable to the IPEC decommissioning project. Indeed, the transaction described in the LTA contemplates such an agreement. More specifically, the MIPA notes that closing is subject to a condition that "NYSDEC shall have executed, or committed to execute upon or immediately after Closing, the State Agreement."[214] That "State Agreement" is intended to address, among other things, cleanup standards.[215] Thus, in addition to being beyond the NRC's jurisdiction, it also would be premature for the NRC to speculate regarding the precise cleanup standards to which the parties may ultimately agree. Thus, Basis C is immaterial, unsupported, and fails to dispute the Application for these additional reasons.

3. The State's Assertion That the DCE Underestimates Site Restoration Costs Is Unsupported, Immaterial, and Fails to Demonstrate a Genuine Dispute with the Application

To be material, the State must demonstrate (with adequate support) that the underestimation alleged in Basis C could "negatively impact the availability of funding for radiological decommissioning."[216] Here, even assuming stricter standards may apply, the State fails to show that costs would be greater than estimated in the DCE, which already entails robust efforts including removal of 3.3 million cubic feet of soil.[217] Additionally, there are multiple safeguards in place to ensure the availability of adequate funds in the NDT. The State fails to acknowledge or dispute the relevant portions of the Application that discuss these Layers of

---

214 LTA, Attach. B, MIPA at 63-64 (Section 8.1(h)).

215 *Id.* at 101 (Section 11.1(282)).

216 *See, e.g.*, "Holtec Decommissioning International, LLC, Pilgrim Nuclear Power Station, Exemption," at 4 (Aug. 22, 2019) (ML19192A086) ("Pilgrim Exemption") (citing this as the reasonable assurance standard related to the use of NDT funds for site restoration costs).

217 PSDAR at 35.

NDT Protection. Thus, Basis C is inadmissible for the additional reason that it is immaterial, inadequately supported, and fails to demonstrate a genuine dispute with the relevant portions of the Application.

First and foremost, as noted in the discussion of the Layers of NDT Protection above, licensees in decommissioning are obligated by law to submit an updated estimate of the costs to complete decommissioning to the NRC every year.[218] To the extent any release standards and site restoration obligations other than those assumed in the current DCE might materially alter the original cost estimates, those changes would be captured in the annual financial assurance status report required by NRC regulations. Licensees also are required to notify the NRC in writing, with a copy to the affected state, of any changes to any actions in the PSDAR "that significantly increase the decommissioning cost."[219] The State fails to acknowledge or dispute these important safeguarding mechanisms that would fully address the precise issue raised in Basis C.

Furthermore, the State ignores the Layers of NDT Protection,[220] and appears to assume (without basis) that any revised site restoration assumptions resulting from the State Agreement would not be captured in the annual financial assurance status report, and that its speculative assumptions and costs associated with its alleged contractual and state regulatory obligations would be so great as to: (1) overcome the substantial contingency, (2) overcome the projected NDT surplus, (3) evade NRC oversight, and (4) be incurable via an alternate funding

---

218 *See* 10 C.F.R. § 50.82(a)(8)(v); *supra* Part V (discussing the Layers of NDT Protection)..

219 *Id.* at § 50.82(a)(7).

220 *See supra* Part V (discussing the Layers of NDT Protection).

mechanism. NYS does not demonstrate, with adequate support, that any of these things are remotely possible.

Perhaps the greatest deficiency in Basis C (and the portions of supporting declarations cited therein) is its complete lack of any independent quantitative analysis or comparative cost estimate specific to IPEC. NYS simply offers no support as to what its alleged increased "costs associated with stricter state-law site restoration requirements" might be—much less does it demonstrate that these unspecified values are greater than the site restoration costs already contemplated in the DCE. In essence, NYS offers nothing more than unsupported *speculation* that the DCE underestimates site restoration costs.[221] Moreover, it offers no support for a showing that such speculative costs could overcome the projected NDT surpluses—nor does it even acknowledge those surpluses. And Basis C further disregards the robust and curative nature of ongoing NRC oversight and HDI's commitment to provide additional funding, which also are described in the DCE. Ultimately, Basis C disregards relevant portions of the DCE, fails to demonstrate the materiality of its arguments, and offers insufficient support for an admissible contention, as required by 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

4. The State's Suggestion that Applicants Will Not Comply with All Valid Legal Requirements Is Unsupported and Inappropriate

In Basis C, the State also makes several additional claims suggesting that the Applicants will not comply with all valid legal requirements that may be applicable to the decommissioning

---

[221] NYS cites an EPRI report for the proposition that certain environmental complications at another plant, in another state, with different remedial standards, caused unspecified cost increases. *See* Petition at 32. But the State makes no attempt to compare the specific factual scenario at that plant with IPEC, or to explain how a similar outcome is possible, much less likely at IPEC which is in all likelihood the most radiologically-characterized site in the country. And it offers no quantitative comparison between the two. Thus, the State's citation to this document is accompanied by nothing more than sheer speculation that HDI's DCE materially underestimates site restoration costs, which is insufficient support for an admissible contention.

of IPEC. But these claims have no basis and contradict settled law. As a general matter, applicants and licensees are entitled to a presumption that they will comply with applicable legal obligations.[222] And the State's various statements in Basis C fail to rebut that presumption. For example, with regard to a known plume of contaminated groundwater, NYS suggests HDI "acknowledge[s] no obligation" to address the plume and simply "plans to leave the contamination in place."[223] As noted above in response to Basis B, the IPEC site has been extensively characterized.[224] And the PSDAR and DCE clearly and explicitly recognize the existence and extent of this plume,[225] and discuss the extensive efforts that will be undertaken to address environmental conditions at the site, such as removing approximately 3.3 million cubic feet of soil.[226] The State's claim to the contrary either disregards or mischaracterizes the following statement in the PSDAR, which acknowledges the plume and explains:

> The selected remedy is Monitored Natural Attenuation (MNA) being addressed under the oversight of the NRC. NRC has concluded that [Entergy's existing and ongoing Long-Term Monitoring Program] has been effectively implemented and *conforms to regulatory requirements that protect public health and safety and the environment* (SEIS, Vol.5; Reference 16). HDI will continue the LTMP, including provisions of the program intended to detect inadvertent releases that may affect ground water, until the objectives of the selected MNA remedy are achieved.[227]

---

222 *Pac. Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-03-2, 57 NRC 19, 29 (2003) ("We have long declined to assume that licensees will refuse to meet their obligations under their licenses or our regulations.") (further citing *Oyster Creek*, CLI-00-6, 51 NRC at 207; *Curators of the Univ. of Missouri* (TRUMP-S Project), CLI-95-8, 41 NRC 386, 400 (1995); *N. Ind. Pub. Serv. Co*. (Bailly Generating Station, Nuclear-1), ALAB-207, 7 AEC 957, 958 (1974)).

223 Petition at 30.

224 *See supra* Part V.B.

225 PSDAR at 30 ("A plume of radiologically-contaminated ground water associated with the IP1 and IP2 spent fuel pools was discovered in 2005, fully investigated and subject to an ongoing Long-Term Monitoring Program (LTMP).").

226 *Id.* at 35.

227 *Id.* at 30.

Thus, a plain reading of the PSDAR demonstrates that, contrary to the State's claim, it clearly addresses groundwater contamination and describes HDI's plans and obligations to remediate the contamination. The PSDAR also explains that further efforts will be undertaken to identify, categorize, and quantify all radiological, regulated, and hazardous wastes and to ensure that all "hazardous, regulated, and radiologically contaminated areas are remediated."[228] HDI is clearly not abandoning its legal obligations related to contaminated groundwater, as the State's unsupported mischaracterization suggests.

Likewise, the State distorts a statement in the PSDAR regarding the IPEC circulating water discharge structure, which is owned by the New York State Energy Research and Development Authority ("NYSERDA") and leased to IPEC. More specifically, NYS claims HDI will "either" abandon the discharge structure in place or return it to NYSERDA.[229] The State considers these options "unreasonabl[e]," given what it describes as Applicants' obligation to address potential contamination of the structure.[230] But the actual statement in the PSDAR indicates "[t]he discharge structure may be returned to its owner, abandoned in place *or removed*."[231] This important third option of removal presents a means of addressing the discharge structure if, in fact, it is necessary. The State's selective quotation leaves the misimpression that HDI intentionally will not comply with its obligations, which clearly is not the case.

Ultimately, nothing in Basis C supplies an adequate basis for a contention.

---

228 *Id.* at 9, 10.

229 Petition at 31.

230 *Id.* at 31 and n.106.

231 PSDAR at 22 (emphasis added).

### D. Basis D (Gas Pipeline) Is Inadmissible

In Basis D, NYS alleges the DCE underestimates costs because it does not account for alleged cost increases that may be caused by two buried natural gas pipelines that are outside both the IPEC Protected Area ("PA") and Security Owner Controlled Area ("SOCA"). More specifically, NYS asserts:

> The Holtec LLCs fail to show financial qualification and adequate decommissioning funding assurance because the PSDAR and decommissioning cost estimate do not account for costs associated with the presence of two aging, high-pressure natural gas transmission lines crossing the Indian Point site in close proximity to Unit 3.[232]

As explained further below, Basis D is inadmissible for multiple reasons. First, the State's general assertion that the presence of the pipelines could increase costs rests on bare speculation, which alone is sufficient grounds to reject the State's argument. But even if the State had supported this assertion, Basis D does not demonstrate that such alleged costs could have a material impact on the DCE. More broadly, NYS reaches the unsupported conclusion that HDI must have disregarded these pipelines because the PSDAR and DCE do not present a specific analysis thereof. But NYS points to no requirement that every potential industrial safety consideration be explicitly itemized in the PSDAR or DCE. Nor is there one. And to the extent NYS demands such itemization, Basis D also is out-of-scope as an impermissible collateral attack on NRC regulations, which do not require what the State asks. Ultimately, the State's arguments collectively are unsupported, immaterial, out-of-scope, and fail to demonstrate a genuine dispute with the application, contrary to 10 C.F.R. § 2.309(f)(1)(iii)-(vi). Accordingly, Basis D fails to support the admissibility of Proposed Contention NY-2.

---

[232] Petition at 33.

1. The State's Speculation Regarding Alleged Pipeline-Related Cost Increases Is Insufficient for an Admissible Contention

NYS claims that the DCE "fails to account" for what it calls (without support) "likely" increased decommissioning costs related to natural gas transmission lines that are owned by another company (Enbridge, Inc.) and buried in bedrock trenches outside the IPEC PA and SOCA.[233] Despite the State's characterization of cost increases as "likely," it fails to identify, with requisite support, any actual costs that would result from the locations of these pipelines. Instead, NYS offers conjecture about "*[p]otential* limitations" related to the use of explosives or the movement of equipment and debris, and speculates that those potential limitations "*could* result in significant and costly project delays."[234] But the State offers no factual support for these claims.[235] Mere guesswork is an insufficient basis for a contention; the Commission has long held that contentions "based on little more than speculation," such as this one, are inadmissible.[236]

Moreover, the PSDAR explains that "[t]he methods assumed to be employed to dismantle and demolish IPEC are standard construction-based techniques."[237] In other words, HDI does

---

233 *Id.* at 33-34. NYS asserts that there are three gas lines in the "immediate" vicinity of IPEC. *Id.* at 34. However, NYS recognizes that the newest line (*i.e.*, the 42-inch line) is located well outside the PA and SOCA. *Id*. at 35. Thus, the State's focus here is on the 26- and 30-inch lines. Moreover, all lines are required to meet all federal pipeline safety standards and are regularly taken out of service and tested for safety. To the extent any issues are identified, corrective actions must be taken. Thus, the State's speculation regarding their "likely . . . fragility" is entirely unsupported.

234 *Id*. at 33 (emphasis added).

235 The State refers to the Brewer Decl. ¶ 14 as support for its arguments in Basis D. *See, e.g.*, Petition at 33 n.112. But that paragraph merely presents a generalized observation that explosives can be used (in some unspecified context) to remove reinforced concrete, but otherwise offers nothing beyond speculation regarding IPEC decommissioning activities. The Commission has long held that speculation by an expert is equally as inadmissible as speculation by a petitioner. *See* Pilgrim, CLI-12-15, 75 NRC at 714 ("Bare assertions and speculation, even by an expert, are insufficient to trigger a full adjudicatory proceeding.") (internal quotations and citations omitted)).

236 *Susquehanna*, CLI-15-8, 81 NRC at 504 (quoting *Oconee*, CLI-99-11, 49 NRC at 334).

237 PSDAR at 39.

not contemplate the use of "explosives" as speculated by NYS. And the PSDAR also explains that "[a]ll dismantlement, demolition, and waste staging activities are envisioned to be conducted *within* the operational area of the site."[238] Thus, "potential limitations" on equipment movement due to gas pipelines buried in bedrock outside the IPEC PA and SOCA, as theorized by the State, are not only speculative, they are improbable. At bottom, Basis D disregards relevant portions of the Application, and its entire premise is unsupported. Thus, it should be rejected as inadmissible for failure to satisfy 10 C.F.R. §§ 2.309(f)(1)(v)-(vi).

2. The State Fails to Demonstrate That the DCE Materially Underestimates Decommissioning Costs

Even assuming *arguendo* that the mere existence of gas transmission pipelines outside the IPEC PA and SOCA *could* increase costs (which the State has not demonstrated), the State fails to quantify any purported increase. The State's claims are unaccompanied by any independent numerical analysis or comparative cost estimate specific to IPEC. Thus, NYS offers no support as to what the alleged "costs" associated with the presence of gas pipelines outside the IPEC PA and SOCA might be—much less does it demonstrate that these unspecified values are greater than the decommissioning costs already contemplated in the DCE. In fact, NYS does not even speculate about these values—*i.e.*, it offers *less* than speculation in this regard. In fact, the State makes no showing that Applicants would even be *responsible* for all such costs should decommissioning activities need to occur near or over the pipelines (which, as noted above, is entirely speculative). For example, if HDI needed to move heavy equipment and loads across the pipeline area, the easement to which the pipelines are subject specifies that HDI need only provide "advance notice," whereas the *pipeline owner* would be required to "outline the

---

[238] *Id.* at 24 (emphasis added).

specifications and advance protection required for the safety of the pipelines," and must bear "[t]he *cost* of such protective measures" for one of the two pipelines.[239]

Nevertheless, to be material (*i.e.*, to "make a difference in the outcome of the licensing proceeding"[240]), NYS would need to show that these speculative increased costs would be so great as to defeat all of the Layers of NDT Protection, including overcoming the projected remaining balance in the NDT funds after decommissioning is completed, evading NRC oversight.[241] NYS neither offers nor makes any such demonstration. Thus, Basis D also fails to demonstrate the materiality of the State's arguments, offers insufficient support for an admissible contention, and fails to dispute the Application, as required by 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

3. NRC Regulations Do Not Require Itemization of Industrial Safety Considerations In a PSDAR or DCE

The sole basis for the State's claim that the DCE underestimates decommissioning costs is that the DCE and PSDAR do not specifically articulate an analysis of, or itemize potential costs related to, the "presence" of gas pipelines.[242] But NYS points to no requirement to do so. Nor is there one. Thus, Basis D is immaterial, unsupported, and fails to identify a genuine dispute for these additional reasons.

Notably, the only mention of NRC regulations in the entirety of Basis D is a brief footnote providing a string cite of four regulations without *any* further discussion of what they

---

239 *See* Grant of Easement from Consolidated Edison Co. of N.Y. to Algonquin Gas Transmission Co. (State of N.Y., Cty. of Westchester, Tract Nos. W-127, W-129, W-130, W-131, W-132) (Liber 6517 at 36) (emphasis added).

240 *Oconee*, CLI-99-11, 49 NRC at 333-34 (quoting Procedural Changes, 54 Fed. Reg. at 33,170).

241 *See supra* Part V (discussing the Layers of NDT Protection).

242 *See, e.g.*, Petition at 33 (asserting HDI "provide[s] no indication" it has consulted with Enbridge and "fail[s] to address [alleged] pipeline-related limitations" on decommissioning activities).

require or how the Application compares to those requirements.[243] But to be admissible, a contention must refer to *specific* portions of the application that the petitioner disputes along with *specific* supporting reasons for each dispute.[244] NYS has not done so here.

Moreover, HDI's DCE is fully consistent with NRC guidance in Regulatory Guide 1.202, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors."[245] For example, that guidance suggests that applicants "*[s]ummarize* total decommissioning costs by period," "*[s]ummarize* the costs of services, supplies, and special equipment," and "*[s]ummarize* undistributed costs."[246] Regulatory Guide 1.202 further indicates that a DCE will fully comply with applicable NRC regulations if it discusses the general "methodology" used to develop the estimate.[247] It also explains that total decommissioning costs should be separated into broad categories like "major radioactive component removal" and "radiological decontamination and dismantlement."[248] Similarly, "[t]he purpose of the PSDAR is to provide the NRC and the public with a *general overview* of the licensee's proposed decommissioning activities."[249] In other words, the level of granular detail NYS demands—*i.e.*, itemization of every potential influence or assumption on costs related to industrial safety or

---

243 Petition at 34 n.114 (citing 10 C.F.R. §§ 50.33(f), 50.34(b)(7), 50.75(b)(1), and 50.80(b)(1)(i)). The sentence in the Petition referring to this string cite makes a passing reference purporting to challenge the *technical* qualifications of Applicants and their contractors associated with the purported failure to analyze the pipelines. This is vastly different from the statement of either NY-2 or Basis D, which deal solely with financial qualifications. Nevertheless, NYS advances no specific arguments related to technical qualifications beyond broad generalizations. Thus, NYS's brief and unsupported mention of technical qualifications fails even to satisfy the basic requirements in 10 C.F.R. §§ 2.309(f)(1)(i)-(ii) for an admissible contention.

244 10 C.F.R. § 2.309(f)(1)(vi); *Susquehanna*, CLI-17-4, 85 NRC at 74.

245 RG 1.202.

246 *Id*. at 1.202-9 (emphasis added).

247 *Id*.

248 *Id*. at 1.202-10.

249 RG 1.185 at 3 (emphasis added).

"movement of heavy equipment"[250]—is far beyond the *summary*-level information the NRC's regulations require. Ultimately, HDI's PSDAR and DCE are fully consistent with NRC guidance. And the State does not claim or demonstrate otherwise.

Further, Basis D incorrectly asserts that the Holtec LLCs "fail . . . to provide any indication that HDI or CDI will create and execute policies" that will address industrial safety implications of the gas pipelines.[251] In fact, the PSDAR states that decommissioning Period 1, "Pre-Decommissioning Planning and Preparation," will include a review of existing IPEC "policies, programs, and procedures."[252] Notably, IPEC's existing policies, programs, and procedures address industrial operation of and safety issues related to the gas pipelines.[253] HDI then will identify any necessary changes to those documents related to decommissioning and pursue subsequent "adoption, revision, replacement, or revocation," consistent with applicable requirements.[254] Thus, contrary to the State's assertion, HDI does in fact indicate that it will create and execute relevant safety-related policies.

Also, in Period 1, HDI will "[d]evelop decommissioning Work Packages (WPs), including . . . *job hazard analyses* to support the WPs."[255] This process will include "area walkdowns with Subject Matter Experts (SMEs) and other appropriate personnel."[256] These analyses would cover the types of activities contemplated by the State, such as "dredging,"

---

250 Petition at 33.

251 *Id.* at 33-34.

252 PSDAR at 8.

253 For example, the IPEC Emergency Plan contemplates coordination with Enbridge, Inc., if necessary.

254 *Id.*

255 *Id.* at 8-9 (emphasis added).

256 *Id.* at 9.

"excavation,"[257] and other significant decommissioning activities that may be conducted in the vicinity of the gas lines. And consistent with Section 4.3.10 of the Decommissioning GEIS,[258] HDI will enforce strict adherence to standards, practices, and procedures of the Occupational Safety and Health Administration ("OSHA").[259] Thus, to the extent the State suggests that HDI plans to disregard well-known and marked potential safety hazards, its claim is contrary to common sense and basic industrial safety practices, and contradicted by the PSDAR itself. And to the extent the State suggests this granular level of engineering analysis and work planning must be presented in the PSDAR, rather than performed in Period 1, it identifies no such regulatory requirement. Nor is there one.[260]

Overall, because the State has not identified an unmet regulatory requirement to provide the allegedly-omitted information, and fails to engage with the Layers of NDT Protection,[261] Basis D is immaterial, unsupported, and fails to identify a genuine dispute with the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi). And furthermore, if Basis D is construed as a demand for itemization of every potential industrial safety consideration across the duration of a decommissioning project, Basis D also is an impermissible collateral attack on NRC regulations,

---

257 Petition at 37.

258 NYS makes an additional passing reference to the Decommissioning GEIS, asserting (without explanation or authority) that it does not bound potential impacts associated with a gas transmission line. Petition at 34. This is another significant departure from the statement of either NY-2 or Basis D, which deal solely with financial qualifications. Nevertheless, NYS advances no specific arguments related to this unsupported stand-alone assertion. Thus, NYS's brief and unsupported mention of a NEPA-related argument fails even to satisfy the basic requirements in 10 C.F.R. §§ 2.309(f)(1)(i)-(ii) for an admissible contention.

259 PSDAR at 31. *See generally, e.g.*, 29 C.F.R. Part 1910, "Occupational Safety and Health Standards"; Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the Occupational Safety and Health Administration (Sept. 6, 2013) (ML11354A432). The State's declarant, Mr. Brewer, suggests that the pipelines are a "unique feature." Brewer Decl. ¶ 14. But the fact remains that industrial safety practices are common to *all* types of hazards.

260 *See generally* NUREG/CR-5884 at 3.1 (noting that "pre-decommissioning engineering and planning operations . . . occur in Period 1").

261 *See supra* Part V (discussing the Layers of NDT Protection).

which require no such thing.[262] Accordingly, it also must be rejected as out-of-scope under 10 C.F.R. § 2.309(f)(1)(iii).

### E. Basis E (SNF Pickup Date) Is Inadmissible

In Basis E, NYS alleges that HDI's DCE fails to show adequate funding for spent fuel management because it relies on the "groundless assumption" that DOE will begin transferring spent nuclear fuel ("SNF") and greater-than Class C ("GTCC") waste from reactors to a federal facility in 2030. NYS alleges that:

> Because HDI's groundless assumption that DOE will begin taking possession of spent nuclear fuel in 2030 leads it to underestimate likely spent fuel management costs, the Holtec LLCs fail to show adequate funding for spent fuel management in violation of 10 C.F.R. §§ 50.54(bb) and 50.82(a)(8)(vii)(B) and (C).[263]

As shown below, Basis E raises no genuine dispute with the Application, is based on speculation, and is not supported by any facts or expert opinions as required by 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi). For these reasons, Basis E fails to identify an admissible basis for a contention.

#### 1. The DCE Reasonably Relies on the Most Recent DOE Guidance

NYS alleges that HDI's assumption in the DCE that DOE will begin transferring SNF and GTCC waste from the industry in 2030 is "without basis."[264] But in the following sentence, the State acknowledges the exact basis HDI used, writing, "HDI *bases this assumption* on a 2013

---

262 As noted above, the provision in 10 C.F.R. § 2.335(a) prohibiting challenges to NRC regulations includes contentions that advocate stricter requirements than agency rules impose. *See, e.g.*, *Turkey Point*, LBP-01-6, 53 NRC at 159-60, *aff'd*, CLI-01-17, 54 NRC 3.

263 Petition at 37.

264 *Id*.

DOE policy document . . . ."[265] And HDI's DCE is clear that its use of the 2030 date reflects the 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*.[266]

While NYS may have its own opinion 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. And HDI's assumption aligns with industry assumptions regarding DOE performance for decommissioning costs estimates, which have been accepted by the NRC.[267] As a result, consistent with the estimates of other licensees, HDI's assumptions reasonably reflect the most current DOE strategy and acceptance rates, but also conservatively accounts for the DOE's lack of performance to date. In contrast, the State cites no more recent guidance from the DOE regarding future performance.

---

265 *Id*. (emphasis added).

266 DCE at 64 (emphasis added).

267 *See, e.g.*, Diablo Canyon Power Plant, Units 1 and 2 – Site-Specific Decommissioning Cost Estimate, at 27 (Dec. 4, 2019) (ML19345D345) ("Diablo Canyon DCE") (assumes DOE will begin accepting SNF in 2031); Site-Specific Decommissioning Cost Estimate for Three Mile Island Nuclear Station, Unit 1, at 13 (Apr. 5, 2019) (ML19095A010) ("TMI DCE") (assuming DOE will being accepting SNF in 2030); Pilgrim Nuclear Power Station DECON Site-Specific Decommissioning Cost Estimate, at 43 (Nov. 16, 2018) (ML18320A040) ("Pilgrim DECON DCE") (assuming DOE will begin accepting SNF in 2030); Site-Specific Decommissioning Cost Estimate for the Crystal River Unit 3 Nuclear Generating Plant, at xiv (Dec. 31, 2013) (ML13343A178) ("Crystal River DCE") (assumes DOE will begin accepting SNF in 2032. *See also, e.g.*, Pilgrim License Transfer SER, at 13 ("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.").

Instead, the State claims NRC's Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157) ("CSR GEIS")[268] shows that HDI's reliance on the 2013 DOE Policy is unreasonable. In particular, NYS asserts that the CSR GEIS states that the "most likely" timeframe for the permanent disposition of spent fuel involved 60 years of continued on-site storage following reactor shutdown, and that this finding somehow makes HDI's assumptions of DOE performance beginning in 2030 "unreasonable." But the CSR GEIS does not establish a genuine dispute with the DCE.

First, the CSR GEIS makes no assumptions or statements on the DOE *start date* but focuses instead on assumptions of when *all* fuel would be removed from U.S. reactor sites. As NYS recognizes, HDI does not assume DOE will remove all of the high-level waste from IPEC until 2061—over forty years from now.[269] This storage period generally aligns with the CSR GEIS.[270]

Second, the State's declarant, Mr. Brewer, opines that there is "no certainty" about HDI's assumption that DOE will remove all fuel by 2061.[271] But this assertion is immaterial because 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.[272] And Mr. Brewer provides no opinion or suggestion as to what would be a "certain" date for DOE performance appropriate for a DCE or even how to arrive at such certainty. And if he suggests

---

268 NUREG-2157, "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel," Vol. 1 (Sept. 2014) (ML14196A105).

269 Petition at 39.

270 More importantly, the analysis of environmental impacts in the CSR GEIS, which bound all scenarios to meet the requirements of NEPA, is separate from and not relevant to the DCE and cash flow analysis necessary to determine whether HDI meets NRC's financial assurance requirements.

271 Brewer Decl. at ¶ 32.

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

fuel may be stored at IPEC "indefinitely," that is gross speculation and inconsistent with the ultimate conclusions of the CSR GEIS. As the Commission has held, "with regard to the fuel-costs claim, while the Continued Storage generic environmental impact statement acknowledges for purposes of NEPA that fuel could remain on-site indefinitely, it finds the short-term period of storage most likely."[273]

NYS also claims that HDI's assumption that DOE will begin accepting SNF in 2030 is unreasonable because DOE requires an act of Congress before it can accept SNF for interim storage.[274] But the State offers no expert opinion or other supporting information to show that DOE *cannot* achieve its policy as a legal or technical matter, or that HDI's reliance on DOE's most recent pronouncements, with the addition of a supplemental five-year conservatism, is unreasonable.[275]

Ultimately, the State fails to provide adequate support for its claim that the DCE's reliance on up-to-date DOE guidance (with an additional 5 year conservatism) is *per se* unreasonable. Thus, it also has failed to demonstrate a genuine dispute with the Application.

2. The State's Speculative Claims Regarding Increased Costs Are Immaterial, Unsupported, and Fail to Dispute the Application

NYS also claims that if DOE does not begin accepting SNF in 2030, then HDI would "likely experience significant, ongoing cost overruns related to spent fuel management" and, as a result, would fail to meet its burden to show adequate funding for spent fuel management.[276]

---

273 *Vt. Yankee*, CLI-16-17, 84 NRC at 118 (citing NUREG-2157, app. B at B-2).

274 Petition at 38.

275 *See* Petition at 37-40. Mr. Brewer does not address HDI's assumed fuel removal start date of 2030 other than saying the DOE's ability to meet any start date is "dependent [on] actions beyond DOE's control." Brewer Decl. at ¶ 32. It is not clear what Mr. Brewer means, as DOE is part of the U.S. Government, which has the unconditional obligation to accept IPEC's fuel.

276 Petition at 40.

NYS again cites the Declaration from Warren Brewer as support for this claim. But Mr. Brewer's Declaration is itself speculative and unsupported. Mr. Brewer claims that:

> If DOE fails to pick up all of the spent fuel by the end of 2061, then Holtec will begin incurring significant and ongoing cost overruns for spent fuel management. *Generally speaking*, these annual costs would be the approximately $12 million per year spent fuel management costs included in the LTA cash flow analysis for 2034 and later.[277]

But beyond his general reference to HDI's cash flow analysis, Mr. Brewer provides no support—or even an explanation—for his conclusion. As the Commission has explained, neither mere speculation nor bare or conclusory assertions, even by an expert, provides sufficient support for an admissible contention.[278]

Furthermore, this generalization regarding speculative cost increases disregards relevant portions of the Application that demonstrate its inaccuracy. For example, the "spent fuel management costs included in the LTA cash flow analysis for 2034 and later" (upon which Mr. Brewer's speculative estimate is based) include one-time costs related to preparing SNF for transportation offsite by DOE.[279] But if there is a delay in DOE performance (as the State speculates), HDI will not incur these transportation preparation costs multiple times, as Mr. Brewer's unsupported estimate assumes.

Additionally, the State's unsupported discussion of alleged cost increases fails to demonstrate that the speculated increases are in fact material because it disregards the multiple Layers of NDT Protection that would prevent such material effects.[280] For example, the State

---

277 Brewer Decl. at ¶ 32 (emphasis added).

278 *See, e.g.*, *Pilgrim*, CLI-12-15, 75 NRC at 714.

279 *See infra* Part V.F.1. *See also* DCE at 100-05 (showing cost increases corresponding to the expected DOE pickup dates (*see* DCE at 64) for costs related to preparing SNF for transportation).

280 *See supra* Part V (discussing the Layers of NDT Protection).

fails to demonstrate that the alleged cost increases would overcome the projected surplus in the NDTs, or that they would overcome HDI's robust contingency allowance. The State disregards the Commission's regulations, which provide for Commission oversight of the NDT funds throughout decommissioning, with a mechanism to demand more funding or assurance if needed.[281] Indeed, the NRC certainly has sufficient time to address such an issue, given that the DCE fully accounts for spent fuel management costs through 2061. NYS has cited nothing that requires HDI now to account for potential further delays by DOE past 2061. And it disregards the fact that any delay by DOE in accepting SNF would lead to liability and recoveries from DOE for the added costs of spent fuel storage, which the DCE *conservatively* excludes from the cash flow analysis.

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. Accordingly, Basis E does not raise a material issue, is unsupported, and raises no genuine dispute with the Application and thus does not provide a basis for the Admission of Proposed Contention NY-2.

### F. Basis F (SNF Transportation Preparation) Is Inadmissible

In Basis F, NYS alleges the DCE improperly excludes costs associated with preparing spent fuel for transportation offsite by the DOE. More specifically, NYS asserts:

> The Holtec LLCs provide no basis for HDI's failure to account either for costs associated with repackaging spent nuclear fuel for transport or, in the event repackaging is not required, for reimbursements to DOE of monies DOE paid or will pay to licensees for licensee packaging costs. The Holtec LLCs therefore fail to demonstrate adequate funding for spent fuel management in

[281] *See generally* 10 C.F.R. § 50.82(a)(8).

> violation of 10 C.F.R. §§ 50.54(bb) and 50.82(a)(8)(vii)(B) and (C).[282]

As explained below, Basis F is inadmissible for multiple reasons. As an initial matter, Basis F alleges a "violation" of NRC regulations. Inasmuch as NYS believes that Applicants are not currently complying with NRC regulations, its recourse properly and exclusively lies in the 10 C.F.R. § 2.206 enforcement petition process, not in this license transfer proceeding. Moreover, the requirements in 10 C.F.R. § 50.82(a)(8)(vii)(B) and (C) are inapplicable and therefore immaterial to this proceeding.[283] Notwithstanding these defects that render Basis F inadmissible on its face, it also is inadmissible because the DCE fully accounts for all relevant costs related to transferring SNF to DOE that are consistent with reasonable assumptions regarding future DOE performance, as discussed in response to Basis E above.[284] Accordingly, Basis F does not support the admissibility of NY-2.

1. The DCE Accounts for Costs Related to Transferring SNF to DOE

The bulk of the State's discussion in Basis F is devoted to establishing that a licensee is obligated, under the DOE Standard Contract,[285] to bear the costs of transferring SNF to the DOE. But there is no dispute on this point. The State correctly notes that the Standard Contract assigns the obligation (*i.e.*, costs) of such transfers to the licensee.[286] However, NYS asserts that "[t]he

---

282 Petition at 40.

283 These regulations impose a requirement to submit annual updates on spent fuel management funding after the DCE has been submitted. HDI submitted its DCE just a few months ago, so this obligation has not yet arisen. And in any event, compliance with 10 C.F.R. § 50.82(a)(8)(vii)(B) and (C) is not a finding the Staff must make to grant a license transfer. *See, e.g.*, Pilgrim License Transfer SER; Oyster Creek License Transfer SER (neither of which include such a finding).

284 *See supra* Part V.E.

285 10 C.F.R. § 961.11 ("Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste").

286 Petition at 42 (citing 10 C.F.R. § 961.11).

Holtec LLCs provide no basis for HDI's failure to account" for costs related to this obligation.[287] To the extent NYS implies HDI has categorically disavowed its obligation to transfer SNF into transportation casks, HDI has done no such thing. Indeed, HDI fully acknowledges this obligation—there simply is no dispute on this point. And to the extent NYS claims costs related to transferring SNF into transportation casks are not included in the DCE, it is mistaken.

The DCE includes a detailed summary of the Work Breakdown Structure ("WBS") by unit.[288] The WBS for all three units *explicitly* includes costs for "Transfer of fuel . . . away from the ISFSI."[289] HDI explained that the WBS structure is adopted from guidance in the International Structure for Decommissioning Costing ("ISDC").[290] The ISDC further clarifies that this standardized costing element includes "Transfer of fuel assemblies" into a "transport cask."[291] Additionally, costs related to preparing SNF for offsite transportation are reflected in the DCE cash flow analyses. More specifically, the spent fuel removal campaigns for IP1, IP2, and IP3 are assumed to occur from 2048-2049, 2031-2048, and 2049-2061, respectively.[292] Corresponding increases in spent fuel management expenditures (reflecting transportation preparation activities) can be seen in the year-by-year cash flow analyses for each unit.[293] Thus,

---

287 *Id.* at 40.

288 DCE at 107-112.

289 *Id.* at 108 (IP1), 110 (IP2), and 112 (IP3) (WBS Code 01.02.10.02.03.02, "Transfer of fuel and/or nuclear material away from the ISFSI – Spent Fuel Management Costs").

290 PSDAR at 6 (citing OECD/NEA, INTERNATIONAL STRUCTURE FOR DECOMMISSIONING COSTING OF NUCLEAR INSTALLATIONS (2012) ("ISDC"), *available at* https://www.oecd-nea.org/rwm/reports/2012/ISDC-nuclear-installations.pdf).

291 *Id*. at 176 (description of item 10.0203).

292 DCE at 64.

293 *Id.* at 100, 102, and 104.

the State's contention of omission is unsupported and fails to dispute the Application because the allegedly-missing information is in fact supplied.

The State also asserts that the DCE does not account for the planned installation of a single-failure-proof crane at IP3.[294] But the State is incorrect here, as well. Certain activities related to the design and engineering of the IP3 single-failure-proof crane are already underway. The costs of those activities incurred *prior* to the transaction closing date are being funded by Entergy from sources other than the IP3 NDT. And costs associated with the crane *after* closing are included in the IP3 WBS item for "Facility shutdown activities" related to "Management of fuel, fissile and other nuclear materials."[295] Again, the allegedly-missing information is, in fact, supplied in the DCE.[296] Thus, this argument also is unsupported and fails to dispute the Application.

2. The State's Claim That a Dry Transfer Station Must Be Constructed Is Unsupported

Finally, the State argues that the DCE omits costs related to constructing a "dry transfer station" ("DTS"). NYS claims a DTS would need to be constructed in order to transfer SNF from IPEC's storage casks into DOE-provided transportation casks. But this speculative claim is unsupported and 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

---

294 Petition at 43, 45.

295 DCE at 111 (WBS Code 01.02.02.01.04).

296 To the extent the State maintains that IP3 crane costs must be presented in a more granular fashion in the DCE, it cites no such requirement to do so. Nor is there one.

and could not be used in transportation casks. However, consistent with current industry practices, IPEC's dry storage system utilizes a *multi-purpose canister* ("MPC") suitable for storage, transportation, and disposal.[297] 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* prior to 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).

As the State correctly notes, DOE could seek to amend the Standard Contract at some point in the future to accept SNF as-is (*i.e.*, inside the storage cask) at the ISFSI.[298] Under that scenario, a licensee clearly would not need to repackage any SNF, and would not need to construct a DTS. HDI's assumption in the DCE that no DTS will need to be constructed is entirely reasonable and consistent with other DCEs, given the large amount of SNF already stored at ISFSIs throughout the United States. NYS offers no other support to explain why re-canistering would be required at IPEC,[299] and thus fails to satisfy 10 C.F.R. § 2.309(f)(1)(v).

---

297 DCE at 65.

298 NYS also suggests that some decades in the future DOE could somehow seek to recoup damages already paid by DOE to ENOI associated with loading IPEC SNF to the ISFSI, and that the Holtec LLCs should somehow have accounted for such a scenario. For many reasons, this argument is baseless. As an initial matter, the State of New York cannot represent any position of the U.S. government in this proceeding. Further, neither NYS nor its declarant, Mr. Brewer, cite to any authority for a legal theory that the government can somehow recoup damages paid many years in the past under the terms of the Standard Contract in place at that time i.e., the current Standard Contract. That is not surprising because there is none. This entirely unsupported and speculative scenario is insufficient for an admissible contention.

299 To the extent 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).

Ultimately, Basis F is unsupported, out-of-scope, immaterial, and fails to demonstrate a genuine dispute with the Application, contrary to 10 C.F.R. § 2.309(f)(1)(v)-(vi), and thus fails to support the admissibility of NY-2.

### G. Basis G (Legacy Mixed Waste) Is Inadmissible

In Basis G, NYS alleges the DCE underestimates decommissioning costs related to mixed waste. More specifically, NYS asserts:

> Because the PSDAR and cost estimate fail to include disposal costs for the mixed waste currently stored at Unit 1, they underestimate waste disposal costs; the Holtec LLCs thus fail to demonstrate adequate decommissioning financial assurance as required under 10 C.F.R. §§ 50.75(b) and (e)(1)(i).[300]

The State asserts that the PSDAR and DCE do not "acknowledge the existence" of certain legacy mixed waste at IP1.[301] Because this particular mixed waste is not explicitly described in the PSDAR or DCE, NYS concludes that costs associated with the disposal thereof must have been disregarded.[302] But the State's claim does not square with the PSDAR, which explains that the DCE calculated costs based on the assumption that "[m]ixed wastes from IP1, 2 & 3 will be transported by authorized and licensed transporters and shipped to authorized and licensed facilities."[303] In other words, the cost estimate expressly contemplates mixed waste disposal costs.

As to the specific legacy IP1 mixed waste identified by NYS, efforts are already underway to remove it from the site. Indeed, the State noted its awareness of these plans in the

---

300 Petition at 45.

301 *Id.* at 46.

302 *Id.* at 47.

303 PSDAR at 13.

Petition.[304] And the Applicants expect removal to be complete prior to closing. Accordingly, because Entergy expects to incur the costs associated with the disposal of the specific IP1 legacy mixed waste prior to transaction closing, and to fund the disposal costs from sources other than the IP1 NDT, these costs are appropriately not included in HDI's DCE as costs that HDI expects to incur post-closing. Hence, the State's claim is unsupported and fails to dispute the Application.

Furthermore, to the extent NYS maintains that every occurrence of mixed waste must be itemized in the DCE, it cites no such requirement to do so. Nor is there one. Itemization of individual occurrences of waste in a DCE is far beyond the summary-level information the NRC requires. As explained in Section V.D.3 above, HDI's DCE is fully consistent with Regulatory Guide 1.202, which provides that applicants should "[s]ummarize" costs.[305] And the State does not claim or demonstrate otherwise. Accordingly, the State has not identified an unmet regulatory requirement. Furthermore, if Basis G is construed as a demand for an itemization of every occurrence of mixed waste, it also is an impermissible collateral attack on NRC regulations, which require no such thing.[306] At bottom, Basis G is out-of-scope, immaterial, unsupported, and fails to identify a genuine dispute with the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

---

304 Petition at 47 (citing Peterson Decl. ¶¶ 7, 9, 10, discussing Entergy's efforts to identify a vendor "to take the [six canisters of] waste for treatment and disposal" and that a "commercial waste processing and disposal pathway does exist for this waste.").

305 RG 1.202 at 1.202-9.

306 As noted above, the provision in 10 C.F.R. § 2.335(a) prohibiting challenges to NRC regulations includes contentions that advocate stricter requirements than agency rules impose. *See, e.g.*, *Turkey Point*, LBP-01-6, 53 NRC at 159-60, *aff'd*, CLI-01-17, 54 NRC 3.

## H. Basis H (Segmentation Timeline) Is Inadmissible

In Basis H, NYS alleges the DCE underestimates costs because it does not account for alleged cost increases that may be caused by delays in segmenting the reactor vessel internals ("RVI") and reactor pressure vessels ("RPV"). More specifically, NYS asserts:

> HDI projects an unreasonably short timeframe for reactor vessel internals and reactor pressure vessel segmentation; because unaccounted-for delay associated with these activities could increase project costs over the current estimate, the Holtec LLCs fail to show adequate decommissioning financial assurance as required by 10 C.F.R. §§ 50.75(b) and (e)(1)(i).

For the reasons detailed below, Basis H fails to identify an admissible basis for a contention. In essence, NYS contends that certain scenarios that resulted in longer segmentation durations at *other* decommissioning reactor sites must be imputed to the IPEC decommissioning project. But, the State offers no reasoned explanation—and more importantly, no meaningful factual comparison between IPEC and the segmentation activities at the other sites—to justify its argument. NYS simply speculates that the same issues perhaps *could* also bear on segmentation timelines at IPEC and thus perhaps *could* increase decommissioning costs by some speculative amount. But as noted throughout this Answer, this type of speculation provides insufficient grounds for an admissible contention. Thus, as detailed below, Basis H is unsupported, immaterial, and fails to identify a genuine dispute with the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

### 1. The State's Speculation Regarding IPEC Segmentation Timelines Is Unsupported and Fails to Dispute the Application

The State offers three general arguments for why it believes the segmentation schedule in the PSDAR is "unreasonably short."[307] First, it speculates that IPEC's PWRs necessarily will

---

[307] Petition at 48.

take longer to segment than BWRs. Second, NYS cites a "history of delays" at other sites and speculates that the same delays will affect the IPEC decommissioning project. And third, NYS speculates that HDI's business plans to decommission reactors at multiple sites could cause delays. As explained below, none of these speculative arguments is sufficiently supported for an admissible contention.

As a general matter, to the extent NYS asserts that segmentation timelines between projects can be compared on an apples-to-apples basis, its assertion is unsupported. Timelines for any given task (*e.g.*, segmentation) are not solely driven by technical limitations—they also may vary based on the relative *priority* placed on the task in the overall decommissioning schedule. Project management objectives such as cost minimization or ALARA considerations inform priorities differently at different sites. Also, for such comparisons to be instructive, they require common assumptions of activities included in the project schedule, *i.e.*, whether they include pre-segmentation planning, post-segmentation disposal, etc. Thus, a site could select a three-year segmentation timeline in order to prioritize upfront spent fuel management activities—but that does not mean that a one-year segmentation project is implausible or unlikely as a technical matter. Further, the actual segmentation effort of a two-year project could be similar to a one-year project if pre- and post-project efforts are included in one schedule but not the other.

Nevertheless, NYS cites the segmentation timeline for decommissioning projects at two BWRs (Pilgrim and Oyster Creek) and affirmatively concludes that segmentation "generally takes less time" for BWRs than PWRs.[308] The State then asserts that, "all things equal,"

---

[308] *Id.* at 50.

segmentation of IPEC's PWRs necessarily will take longer than segmentation at Pilgrim and Oyster Creek.[309] And because the segmentation timeline in HDI's PSDAR is *not* longer than Pilgrim's and Oyster Creek's, the State concludes it is *per se* "unreasonably short."[310] But this logic is untenable.

Even assuming *arguendo* that the State's broad generalization regarding BWRs and PWRs is correct, the State's logic requires a significant further assumption that "all things" are in fact "equal" here. But, it fails to explain or support this necessary assumption. Nor could it. Each decommissioning project is unique. The State's logical leap disregards the entire universe of site-specific factual and technical considerations that influence decommissioning timelines. It also discounts the fact that the IPEC decommissioning project will benefit from efficiencies gained through the iterative process of lessons learned on past projects (*including* Pilgrim and Oyster Creek) and the accumulation of decommissioning operating experience by both HDI and its vendors more broadly. Ultimately, the State's generalization regarding PWRs and BWRs fails to identify, with the required specificity, any deficiency in the segmentation timelines in the PSDAR.

Second, NYS cites a "history of delays" in segmentation projects at other sites and speculates that the same delays will impact the IPEC decommissioning project.[311] For example, NYS asserts that segmentation and packaging of the RPVs and RVIs at Zion took "twice as long as originally expected."[312] Similarly, the State points to the Connecticut Yankee segmentation,

---

309 *Id*.

310 *Id.* at 48.

311 *Id.* at 50.

312 *Id*.

which "proved to be a very challenging project."[313] NYS also mentions an adjustment in the expected segmentation schedule at Pilgrim.[314] But the State does *not* identify:

- what caused the adjustments and delays at these other sites;
- what factual and technical similarities may exist between those sites and IPEC; or
- why the adjustments and delays at these sites are possible (much less, likely) at IPEC.

The State simply asserts that the fact-specific experiences at these sites necessarily must be imputed to IPEC. Moreover, the State's references to the experience at Connecticut Yankee—a project that was performed in 2000—ignore significant technological advancements across the past few decades. At bottom, absent reasoned explanations and corresponding support for the bulleted items above (which is clearly the State's burden at this point in the proceeding),[315] its demand falls short of identifying a genuine dispute with the Application.

Basis H also includes a stand-alone sentence speculating that HDI's plan to decommission reactors at multiple sites *per se* creates a likelihood of schedule delays.[316] More specifically, NYS claims that (unspecified) project delays at one site may delay activities at another site due to workforce shortages and management overextension.[317] But these claims are unaccompanied by adequate support. The State identifies no likelihood of delays at other sites;

---

313 *Id.* (internal quotations and citation omitted).

314 *Id.* at 51. This issue has been raised in the ongoing Pilgrim license transfer proceeding, but as applicants in that proceeding noted, the segmentation timeline adjustment did not impact the overall expected date for partial site release. *See* Entergy Nuclear Operations, Inc., *et al*. (Pilgrim Nuclear Power Station; Docket Nos. 50-293-LT, 72-1044-LT) Applicants' Answer Opposing the Motion of the Commonwealth of Massachusetts to Amend its Petition with New Information at 4 (Jan. 7, 2020) (ML20007E918) ("Pilgrim Applicants' Answer to Motion to Amend").

315 *See Palisades*, CLI-15-23, 82 NRC at 325, 329.

316 Petition at 51 ("At Indian Point, delays experienced at an early stage of HDI's phased decommissioning process could delay later-stage activities, including unit dismantlement and demolition.").

317 *Id.* (citing Brewer Decl. ¶ 10).

no support (*e.g.*, regional labor statistics) for its claim that workforce shortages are likely (or even plausible) at IPEC; and no basis for its speculation regarding the bandwidth of HDI management or its selected segmentation vendors. And the State fails to engage with or dispute relevant information in the PSDAR. For example, HDI explains that it plans to leverage incumbent plant personnel, and specifically states that "IP1, 2 & 3 personnel on site at the time of license transfer will be incorporated into the decommissioning organization according to their expertise and the position that they held within ENOI."[318] The State's argument, which layers speculation upon conjecture, and disregards relevant information, is inadequate for an admissible contention.

Overall, the State's challenge to the PSDAR's estimated timeline for segmentation is unsupported and fails to identify a genuine dispute, contrary to 10 C.F.R. §§ 2.309(f)(1)(v)-(vi).

2. The State's Speculation Regarding Costs Associated with Speculative Segmentation Delays Is Unsupported, Immaterial, and Fails to Dispute the Application

Even if the State had established, with requisite support, that the segmentation timeline in the PSDAR is insufficient (which it has not done), Basis H is inadmissible for the additional reason that it fails to support a claim that an associated schedule adjustment would necessarily create a material deficiency in the NDT. In particular, NYS offers no alternative demonstration of an appropriate segmentation timeline, and no meaningful analysis of the purported additional costs associated with that unspecified timeline. At most, Basis H claims that delays "generally" increase costs, and speculates about potential costs of delays at IPEC based on unreliable shorthand math. However, this type of speculation is insufficient to support an admissible

[318] PSDAR at 8.

contention and fails to demonstrate either the materiality of Basis H or a genuine dispute with the Application.

For example, Basis H presents the basic proposition that "[d]elays generally increase project costs."[319] As alleged support, the State claims that "unforeseen expansions of the project scope led to increases in project staffing costs" in the Humboldt Bay decommissioning project.[320] But NYS simply cites a difference in estimated "staff costs" between the 2005 version of the Humboldt Bay decommissioning funding report versus the 2011 version.[321] In other words, it supplies no support for its assertion that the difference was related to "project scope" or alleged delays. It also speculates that the Pilgrim schedule adjustment for segmentation activities (discussed above) may result in a $110 million cost increase.[322] The State's declarant raised this same speculation in the Pilgrim license transfer proceeding. But, as the applicants there noted, the schedule adjustment for segmentation activities neither impacted the overall timeline for decommissioning nor increased costs.[323] The State's contrary assertion, that segmentation adjustments *per se* delay overall timelines and increase costs, is simply unsupported. Notwithstanding, even if the State had identified delays and cost increases in other projects at other sites, this discussion fails to explain what facts led to these circumstances, what common factual predicate may exist between these projects and IPEC, or why a similar cost increase

---

319 Petition at 51.

320 *Id.* at 52 (citing Brewer Decl. ¶ 17).

321 Brewer Decl. ¶ 17 (*comparing* Letter from G. Rueger, PG&E, to NRC Document Control Desk, "Decommissioning Funding Report for Humboldt Bay Power Plant Unit 3," Attach. 3 (Mar. 31, 2005) (ML050950368) *with* Letter from J. Conway, PG&E, to NRC Document Control Desk, "Decommissioning Funding Report for Humboldt Bay Power Plant Unit 3," Attach. 3 (Mar. 31, 2011) (ML110910149)).

322 Petition at 52 (citing Brewer Decl. ¶ 19).

323 *See* Pilgrim Applicants' Answer to Motion to Amend at 4-5.

purportedly must be assumed at IPEC. These generic arguments fail to provide support for Basis H or identify a genuine dispute with the Application.

The State also offers speculation regarding the purported cost of a delay in the IPEC decommissioning project associated with presumed segmentation schedule adjustments. According to NYS, a delay "at an early stage" in the project would increase costs by $110 million per year.[324] Although not clearly explained, the State's asserted value appears to be based on a rough addition of project management costs for IP1, IP2, and IP3 (from Tables 3-2a, 3-2b, and 3-2c in the DCE) in the 2021-2022 time frame. Thus, the premise of this claim is a vastly oversimplified and unsupported assumption that the decommissioning project entails a perpetual annual expenditure of project management costs *regardless* of the specific factual posture of the decommissioning project. Although the State's declarant acknowledges that this expenditure generally decreases over time, this gross oversimplification fails to engage meaningfully with any of the detailed and relevant information in the PSDAR or DCE.

As explained in the DCE, the Program Management category includes a variety of indirect labor and project support costs that are not readily subdivided for purposes of allocating the costs to individual periods. But Basis H fails to offer a reasoned explanation of why these dozens of categories and subcategories of costs (*e.g.*, training, IT support, office equipment) necessarily would be incurred in direct proportion to a segmentation delay envisioned by NYS *i.e.*, a year-for-year delay in the *overall* decommissioning schedule. In sum, this back-of-the-envelope estimate of speculative cost increases ignores the substantial complexities of a realistic decommissioning schedule with its many moving parts, and defies the reality that a schedule

---

[324] Petition at 52 (citing Brewer Decl. ¶19).

adjustment for one task can be offset by adjustments to other tasks resulting in no overall delay and no associated cost increase. This is simple project management 101. And the State's argument that *any* schedule adjustment for a specific task *per se* results in substantial cost increases is both overly simplistic and grossly speculative. Because the State's speculation is based on little more than guesswork, it is insufficient for an admissible contention.[325]

Moreover, to be material (*i.e.*, to "make a difference in the outcome of the licensing proceeding"[326]), NYS would need to show not only that HDI's assumptions are entirely *implausible*, but also that the increased costs speculated by the State would be so great as to defeat all of the Layers of NDT Protection (*i.e.*, to overcome the projected remaining balance in the NDT after decommissioning is completed, overcome the substantial contingency included in the DCE, evade NRC oversight, and be incurable via an alternate funding mechanism).[327] But the State does none of these things. In short, Basis H repeats its earlier speculation about a potential delay at Pilgrim, speculates that an identical delay will occur at IPEC, speculates that the overall decommissioning schedule will in turn be extended three years, and speculates that HDI will incur additional overheads during those three years, and entirely disregards the portions of the Application that address the Layers of NDT Protection. As explained above, this layered speculation ignores the realities of real-world project planning and thus is insufficient for an admissible contention.

---

325 *Crow Butte Res., Inc.* (N. Trend Expansion Project), CLI-09-12, 69 NRC 535, 552 (2009) (admitting "contentions grounded on little more than guesswork would waste the scarce adjudicatory resources of all involved.").

326 *Oconee*, CLI-99-11, 49 NRC at 333-34 (quoting Procedural Changes, 54 Fed. Reg. at 33,170).

327 *See supra* Part V (discussing the Layers of NDT Protection).

Accordingly, Basis H is unsupported, immaterial, and fails to demonstrate a genuine dispute with the Application for these additional reasons.

## I. Basis I (NDT Commingling) Is Inadmissible

In Basis I, NYS suggests the DCE impermissibly contemplates the commingling of NDT funds between the IPEC units. More specifically, NYS asserts:

> The Holtec LLCs may be planning to use trust monies from Unit 3 to pay for work at other Indian Point units; this practice, unauthorized under NRC regulations, renders the license transfer application unapprovable as submitted.[328]

At the most basic level, Basis I does not support an admissible contention because it fails to demonstrate that trust funds are being commingled. The State acknowledges as much in the statement of the contention, which hesitantly suggests the DCE "may" involve commingling. In fact, no commingling is contemplated in the DCE. NYS simply overlooks relevant information therein. Thus, Basis I does not supply an admissible basis for Proposed Contention NY-2.

NYS claims that "HDI appears to be using Unit 3 trust fund dollars to pay for decommissioning activities at other Indian Point units."[329] More specifically, the State points to the PSDAR's estimated timeline for the IP3 demolition task (which ends in 2027),[330] but observes that the DCE still reflects labor costs for IP3 in years 2028 through 2031.[331] Because the estimated end dates for the IP1 and IP2 demolition tasks are 2031 and 2029, respectively, the State suggests the IP3 labor in years 2028 through 2031 is "subsidiz[ing]" work at the other

---

328 Petition at 53.

329 *Id*.

330 *Id.* (citing PSDAR at 16, fig.3-1 "Decommissioning Schedule").

331 *Id.* (citing PSDAR at 84).

units.[332] But the State's speculation regarding commingling is premised on its incorrect reading of the DCE and corresponding incorrect assertion that decommissioning activities at IP3 will be complete by 2027.[333]

As explained in the DCE, decommissioning of IP3 is not scheduled to be complete in 2027.[334] The DCE's summary of WBS elements clearly shows that "Waste Processing, Storage and Disposal" for IP3 continue through December 2032.[335] Accordingly, IP3 decommissioning does not end simply because Unit 3 is scheduled to be demolished in 2027.[336] Furthermore, spent fuel management and site restoration activities associated with IP3 also continue well beyond 2027.[337] Ultimately, the State's observation that labor allocations to IP3 (associated with various license termination, spent fuel management, and site restoration activities) continue beyond the demolition date does not identify any commingling of funds between units. The State simply jumped to conclusions and failed to acknowledge or dispute relevant information in the PSDAR or DCE that explains "what work the employees assigned to [IP3] would be doing."[338] As the Commission has explained, petitioners have an "iron-clad" obligation to

---

332 *Id.* at 53-54.

333 *Id.* at 53.

334 DCE at 58, tbl.2-1.

335 *Id*. *See also, e.g.*, PSDAR at 12-13 (generally describing these activities).

336 Moreover, common facilities at the IPEC site (*i.e.*, those not specific to a single unit) also must be decommissioned.

337 DCE at 58, tbl.2-1.

338 Petition at 53.

thoroughly examine the application.[339] The State failed to do so here. Thus, Basis I is unsupported and fails to demonstrate a genuine dispute with the Application.[340]

* * *

In summary, Proposed Contention NY-2 speculates without factual or quantitative support that certain hypothetical scenarios *might* result in costs above those estimated in the DCE. But as a matter of law, bare speculation provides insufficient support for an admissible contention. The State's arguments also disregard multiple layers of safeguards against negative impacts to the NDT, and thus fail to provide the required demonstration of materiality or of a genuine dispute with the application. And certain of the State's arguments challenge NRC regulations or raise issues beyond the scope of this proceeding. Moreover, the State's various bases misapprehend the relevant legal standard of "reasonable assurance" applicable to demonstrations of financial qualifications. Applicants are not required to provide absolute certainty in financial projections; and the State's attempts to "cast doubt" on Applicants' plausible assumptions and projections are insufficient as a matter of law to support an admissible contention. Ultimately, none of the State's sub-contentions support the admissibility of Proposed Contention NY-2 because, individually and collectively, they fail to demonstrate (with adequate

---

339 *N. States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 & 2), CLI-10-27, 72 NRC 481, 496 (2010) (internal quotations and citation omitted).

340 Notwithstanding that NYS has not identified any commingling, and that HDI does not propose to do so here, its claim that commingling is *per se* "impermissible" is incorrect and unsupported. In fact, the NRC has accepted licensees' demonstration of funding assurance on a site-wide basis, as opposed to a unit-by-unit approach, for multi-unit integrated sites. *See* Zion License Amendment SER at 3-8 (cost estimate and financial assurance addressed at project level, not broken down by unit); Decommissioning Funding Report for Zion Nuclear Power Station, Units 1 and 2 at 2 (Mar. 30, 2011) (ML11111A129) ("Zion Decommissioning Funding Report") (noting that the funding and cost estimate are "aggregated for the entire project" because the units are "being decommissioned concurrently as a single integrated project"); Letter from L. Wharton, NRC, to G. Overbeck, APS, "Palo Verde Nuclear Generating Station, Unit 1 – Decommissioning Trust Fund Balance (TAC No. MB3158)" (Dec. 11, 2001) (ML013340484) (approving intra-site transfer of NDT funds without a license amendment or exemption). *See also* 10 C.F.R. § 50.2 (defining "decommissioning," as used in 10 C.F.R. §§ 50.75 and 50.82, as work at "the facility or site" to release "the property").

support) *either* that the DCE is premised on entirely "implausible" assumptions *or* that the speculative underestimations postulated by the State will defeat all of the Layers of NDT Protection. And they certainly do not demonstrate both. Thus, Proposed Contention NY-2 should be rejected for failing to satisfy the admissibility criteria in 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi).

## VI. PROPOSED CONTENTION NY-3 (FINANCIAL QUALIFICATIONS) IS INADMISSIBLE

Proposed Contention NY-3 is a wide-ranging challenge to the financial qualifications of HDI, Holtec IP2, and Holtec IP3. The State alleges:

> The license transfer application and supporting materials fail to show the Holtec LLCs are financially qualified within the meaning of 10 C.F.R. §§ 50.33(f), 50.40(b), 50.80(b), 50.82(a), and 72.30(b).[341]

The State's primary assertion is that the Applicants may not rely solely on the prepaid NDTs to demonstrate financial qualifications, and that the future licensees must demonstrate "additional" financial assurance before the transfer can be granted. As explained below, the entire premise of this argument is contrary to established law and precedent, and therefore it is inadmissible on multiple grounds. Proposed Contention NY-3 also repeats multiple arguments presented in Proposed Contentions NY-1 and NY-2, which are inadmissible for all of the many reasons discussed above. And finally, Proposed Contention NY-3 includes a potpourri of additional assertions (for example, suggesting LLCs cannot hold NRC licenses, providing comments for NRC Staff's review, and complaining that proprietary material has been withheld) that are variously out-of-scope, immaterial, unsupported, and fail to dispute the Application.

---

[341] Petition at 54.

Ultimately, no part of Proposed Contention NY-3 raises an admissible contention, and it should be rejected accordingly.

### A. Applicants May Rely on NDTs to Demonstrate Financial Qualifications, and the State's Contrary Claims Are Unsupported, Immaterial, Out-of-Scope, and Do Not Raise a Genuine Dispute with the Application

NYS claims that the Application is deficient because it does not show that the Holtec LLCs are "healthy corporate entities" and their "sole reliance on the trust funds" for revenue does not meet regulatory standards.[342] In particular, NYS claims that Holtec IP2 and Holtec IP3 are not "adequately capitalized" and do not explain how they plan to "fund their day-to-day operating expenses."[343] The State also claims that HDI lacks non-decommissioning revenue and has not shown that it is a "viable going concern."[344] According to the State, without access to a non-NDT revenue stream, the Holtec LLCs will be unable to procure additional financial assurance "in the event of a projected cost overrun" and therefore have not shown adequate financial qualifications.[345] NYS notes that, if the NDTs are found to be insufficiently funded *in the future*, the NRC could demand the licensee provide additional funding;[346] but here, NYS demands that the Applicants demonstrate such "additional" financial assurance (*i.e.*, that above what is required by NRC regulations to grant the license transfer) "*now*—not at some indeterminate point in the future."[347] But the State cites no law, rule, or regulation that imposes such a requirement. Nor is there one. Simply put, the State is attempting to impose financial

---

342 *Id.* at 56-58.

343 *Id.* at 58.

344 *Id.* at 56-57.

345 *Id.* at 56-59.

346 *See generally* 10 C.F.R. §§ 50.82(a)(8)(vi), (vii)(C).

347 Petition at 56 (emphasis in original).

requirements *beyond* those in NRC regulations, which is impermissible and beyond the scope of this proceeding.[348]

In a larger sense, this argument reflects the State's incorrect interpretation of NRC regulations on the level and type of financial qualifications required for a license transfer. The Commission, however, has spoken directly on this issue and explained that it does not require absolute certainty in financial projections:

> [T]he level of assurance the Commission finds it reasonable to require regarding a licensee's ability to meet financial obligations is less than the extremely high assurance the Commission requires regarding the safety of reactor design, construction, and operation. The Commission will accept financial assurances based on *plausible assumptions and forecasts*, even though the possibility is not insignificant that things will turn out less favorably than expected. Thus, *the mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance*.[349]

The NRC also has a rigorous and comprehensive regulatory regime to provide continual assurance that funding for decommissioning remains adequate after a plant permanently ceases operation.[350] This includes required annual reporting on the adequacy of decommissioning funding assurance for decommissioning IPEC and funds to manage SNF.[351] Based on these annual reports, the NRC can require—*in the future*—any necessary adjustments to the decommissioning funding assurance, restrict withdrawals from the NDTs, or both, to ensure that

---

348 When a contention advocates for stricter requirements than NRC's regulations impose, the Commission considers it an impermissible attack on its regulations. *See Vt. Yankee*, LBP-15-4, 81 NRC at 167; *Seabrook,* CLI-12-5, 75 NRC at 315; *Oyster Creek*, CLI-00-6, 51 NRC at 206; *TRUMP-S Project*, CLI-95-1, 41 NRC at 170.

349 *Seabrook*, CLI-99-6, 49 NRC at 221-22 (emphasis added).

350 *See generally* 10 C.F.R. § 50.82(a); *see also* NUREG-1577 at 5 ("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.").

351 10 C.F.R. §§ 50.82(a)(8)(v) and (a)(8)(vii).

the NDTs can fund decommissioning activities and ultimately release the site and terminate the license.[352] 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."[353]

Furthermore, NRC precedent supports the Applicants' position that they can rely solely on the funds in the NDT, and the inherent safeguarding nature of the Layers of NDT Protection,[354] to demonstrate adequate financial qualifications. NRC Staff has twice approved license transfer applications for nuclear generating plants that would be permanently shutdown at the time of the transfer where the transfer applicants relied solely on the funds in the NDTs to establish their financial qualifications.[355] 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.[356] And NRC found that the reliance on funds available in the NDTs satisfied the financial assurance and financial qualification requirements of 10 C.F.R. §§ 50.33(f), 50.33(k)(1), 50.54(bb), 50.75, and 50.82(a).[357]

---

352 10 C.F.R. § 50.82(a)(8)(i)(A)-(C).

353 *Vt. Yankee*, CLI-16-17, 84 NRC at 118; *see also* Oyster Creek, CLI-19-6, 90 NRC at __ (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).

354 *See supra* Part V (discussing the Layers of NDT Protection).

355 *See* Oyster Creek License Transfer SER at 7-10; Pilgrim License Transfer SER at 7-15.

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

357 Oyster Creek License Transfer SER at 10; Pilgrim License Transfer SER at 15.

At bottom, while these regulations (which the State cites in Proposed Contention NY-3) require showings of financial qualifications and financial assurance, nowhere do they prohibit relying on NDTs to do so. And in contrast, the regulation governing decommissioning planning—10 C.F.R. § 50.75(e)—specifically allows the use of trust accounts to show financial assurance for decommissioning.[358] Thus, as a matter of law, NRC regulations do not require Applicants to demonstrate "additional" financial assurance "now," or prohibit them from reasonably relying on the NDTs to make the required demonstrations, as the State claims. Accordingly, Proposed Contention NY-3 is unsupported by law or fact, and constitutes an impermissible collateral attack on NRC regulations, which renders it outside the scope of this proceeding.

### B. The State's Claim That the Proposed Licensees Lack Other Revenue Is Unsupported and Does Not Raise a Genuine Issue with the Application

As to the State's claim that the Holtec LLCs have no revenue source other than the NDTs, and will be unable to comply with NRC demands for "additional" financial assurance "in the event of a projected cost overrun,"[359] the State ignores their claim to recoveries from the DOE for spent fuel management costs. HDI's decommissioning cash flow analyses 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.[360] Even though HDI conservatively did not rely on these recoveries in its cash flow analyses, the NRC has found that "the assumption of DOE reimbursement is a reasonable source of additional funding. In recent years DOE

---

358 10 C.F.R. § 50.75(e).

359 Petition at 56-59 (citation omitted).

360 DCE at 100-05, column 3, "50.54(bb) Spent Fuel Management Cost."

reimbursements have become more consistent and predictable despite the longevity of the litigation process and complexity of DOE standard settlement agreements."[361]

In short, the Application contradicts the State's claim that the Holtec LLC's lack other revenue apart from NDT disbursements. The State's claim to the contrary is unsupported and fails to raise a genuine dispute with the Application.

### C. The State's Repeated Claims from Proposed Contentions NY-1 and NY-2 Are Inadmissible for the Same Reasons Explained Above

The State repeats several claims it made in Proposed Contentions NY-1 and NY-2. More specifically, it repeats its claim from Proposed Contention NY-1 that HDI cannot assume a two-percent rate of return in its cash flow analysis.[362] NYS also repeats its claims from NY-2, Bases B and H, that unforeseen project delays, HDI's plan to decommission multiple sites simultaneously, the discovery of additional radiological and non-radiological contamination, and other non-specific "out-of-scope risks" could lead to the NDTs being exhausted before HDI finishes decommissioning.[363] And NYS repeats its claim from NY-2, Basis E, that HDI's assumption that DOE will begin accepting SNF in 2030 is flawed.[364] For the same reasons explained above in response to these various claims, which Applicants incorporate by reference here, the State's claims are variously speculative, unsupported, immaterial, out-of-scope, and fail to raise a genuine dispute with the Application.[365]

---

361 Vt. Yankee License Transfer SER, at 15.

362 Petition at 62, 67; *see also id.* at 4-8.

363 *Id.* at 56-63; *see also id.* at 18-26. NYS cites paragraph 10 of Warren K. Brewer's Declaration in which Mr. Brewer cites delays that occurred at two other nuclear sites (Pilgrim and Oyster Creek). But Mr. Brewer does not explain the cause of those delays or why they should be expected to occur at IPEC.

364 Petition at 55-56, 59-60, 67; *see also id*. at 4-8, 37-40.

365 *See supra* Parts V.B, V.E, V.H; *see also generally supra* Part V.

## D. The State's Various Other Assertions Fail to Demonstrate an Admissible Contention

### 1. The State's Comments on the Staff's Review Are Outside the Scope of This Proceeding

In Proposed Contention NY-3, the State makes several suggestions to the Commission and NRC Staff about how they should conduct their review of the Application. These suggestions, however, are more appropriately viewed as comments, and are not a proper basis for an admissible contention. As the Commission has clearly stated, "'[I]t is the license application, not the NRC Staff review, that is at issue in our adjudications.'"[366] And "a contention will not be admitted if the allegation is that the NRC Staff has not performed an adequate analysis . . . the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements, rather than adequacy of the NRC Staff performance."[367] The State's suggestions to the Commission and NRC Staff about how to conduct their review of the Application are thus outside the scope of this proceeding.

The out-of-scope comments include the following:

- NRC should conduct "heightened scrutiny" of the Application because of a lack of publicly available financial information about HDI, Holtec IP2, and Holtec IP3;[368]
- NRC should "rigorously scrutinize the Holtec LLCs' finances to ensure they are able to responsibly address the risks they are likely to face";[369]
- NRC should "require that the Applicants provide additional forms of financial assurance";[370]

---

366 *Turkey Point,* CLI-01-17, 54 NRC at 25 (citation omitted); *Shaw Areva MOX Serv., LLC* (Mixed Oxide Fuel Fabrication Facility), CLI-15-9, 81 NRC 512, 531 (2015) ("the adequacy of the Staff review is not a litigable issue in a licensing case.").

367 Procedural Changes, 54 Fed. Reg.at 33,171.

368 Petition at 59.

369 *Id.* at 60.

370 *Id*.

- "NRC Staff should request and review historic fund valuation statements for each of the decommissioning trusts";[371]

- "NRC Staff should request and review any private letter rulings obtained by the Applicants from the Internal Revenue Service";[372]

- "Staff should be particularly aware that the granting of an eventual exemption to allow the use of trust fund monies for non-decommissioning purposes could impact the tax rate applied to disbursements from the funds, potentially reducing the monies available to fund ongoing decommissioning and related activities";[373]

- Staff should request a copy of the investment guidelines for the NDTs that were an attachment to the Membership Interest Purchase Agreement;[374]

- "The ASLB should review the Holtec LLCs' proposed investment guidelines as part of its financial qualifications inquiry to ensure that they are adequately conservative."[375]

These comments offering the State's opinion on how the NRC should review the Application are outside the scope of this proceeding and do not provide the basis for an admissible contention.

2. The State's Failure to Request Access to Proprietary Material Does Not Supply an Admissible Basis for a Contention

NYS claims that it was unable to "access key financial information on Holtec and its subsidiaries" and that financial information was "redacted and therefore unavailable for public review."[376] Accordingly, NYS states that it will pursue other "available discovery tools to obtain full disclosure of relevant financial information" for some unspecified purpose.[377] But the State

---

371 *Id.* at 62.

372 *Id.* at 63.

373 *Id*.

374 *Id*.

375 *Id.*

376 *Id.* at 61, 64.

377 *Id.* at 61. As a general matter, the State should not be permitted to disregard the NRC's procedures and instead pursue "discovery" at some point in the future.

ignores the fact that the Hearing Opportunity Notice included specific directions on how to access "proprietary, confidential commercial information that has been redacted from the application."[378] The State's failure to take advantage of these published procedures and request access to redacted information is not prejudicial to the State, nor is it a basis for an admissible contention.[379] Indeed, the State's acknowledgement in this regard further demonstrates that its various claims are unsupported because NYS failed to fulfill its "iron-clad" obligation to thoroughly examine the Application.[380]

3. The State's Claims that Holtec Could Commingle Funds from Multiple Decommissioning Projects Is Unsupported Speculation

NYS also claims that Holtec could try to cover cost increases at one decommissioning project to fund decommissioning work at other projects in a "pyramid scheme wherein the first site may achieve success, but the last site may be left short to the degree NDT reimbursements are comingled as one revenue stream within HDI."[381] This claim is no more than unsupported speculation. Moreover, this claim ignores the NRC's oversight of NDT disbursements and the annual cost reports that licensees must file. In particular, Section 50.82(a)(8)(i) limits NDT withdrawals to "expenses for legitimate decommissioning activities" and prohibits withdrawals that would reduce the NDT below an amount necessary to put the facility into SAFSTOR or inhibit the ability of the licensee to complete funding of any shortfalls in the NDT to ensure the availability of funds to release the site and terminate the license.[382]

---

378 Hearing Opportunity Notice at 3,950 .

379 *Holtec Int'l* (HI-STORE Consolidated Interim Storage Facility), LBP-19-4, 90 NRC __, __ (May 7, 2019) (slip op. at 79, 89).

380 *Prairie Island*, CLI-10-27, 72 NRC at 496.

381 Trabucchi Decl. at ¶ 40; *see also* Petition at 61.

382 10 C.F.R. § 50.82(a)(8)(i)(A)-(C).

The State's alleged "pyramid scheme" would require a licensee to deliberately violate one (or most likely all) of these rules. It would also likely require a licensee to violate the annual reporting requirement to show sufficient funds remain available to complete decommissioning at a site.[383] But in adjudicatory proceedings, the Commission or an Atomic Safety and Licensing Board "will not presume that an applicant or licensee, and those who work for them, will not adhere to applicable regulations or standards."[384] Thus, the State cannot rely on these pejorative allegations as the basis of an admissible contention.

4. The State's Suggestion That LLCs Cannot Hold NRC Licenses Is Unsupported, Immaterial, and Does Not Raise a Genuine Dispute with the Application

NYS also claims that Holtec is improperly seeking to shield itself (and its owners) from legal and financial liability by using a series of limited liability corporations.[385] The State claims that "Holtec has created a corporate structure designed to insulate itself from the financial risk borne by its subsidiaries" and that a default by one Holtec's "special purpose limited liability entities" could "leave the task of funding any remaining decommissioning, site restoration, and/or spent fuel-related obligations at Indian Point to New York taxpayers."[386] The State also claims that these special purpose limited liability corporations lack transparency, which "undermines the Commission's ability to effectively and adequately assess financial

---

383 *Id.* at § 50.82(a)(8)(v).

384 *Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation), LBP-00-35, 52 NRC 364, 405 (2000); *see also PowerTech (USA), Inc.* (Dewey-Burdock *In Situ* Uranium Recovery Facility), CLI-16-20, 84 NRC 219, 256 (2016) ("absent evidence to the contrary, we assume . . . that a licensee will comply with its obligations.") (citation omitted).

385 Petition at 64-66.

386 *Id.* at 64-65.

qualifications."[387] In essence, the State appears to claim that LLCs are *per se* unqualified to hold NRC licenses.

The State's claim, however, is unsupported—and plainly incorrect—as is the Declaration of Chiara Trabucchi on which it relies.[388] As an initial matter, 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. And NYS's claim ignores the clear weight of NRC precedent, in which 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 38 nuclear plants.[389] NYS also ignores NRC precedent in which the NRC has approved license transfers of shutdown or shutting down nuclear plants to LLCs for purposes of decommissioning.[390] Accordingly, the State's claims in this regard are unsupported, immaterial, and do not raise a genuine dispute with the Application.

5. The State's Claims About Past Holtec Actions and Its Past Management Culture Are Outside the Scope of This Proceeding

The State also claims that Holtec's past behaviors "do[] not inspire confidence in either its management culture or its ability to comply with regulatory requirements."[391] This claim is akin to a similar one raised by another petitioner, Riverkeeper, Inc., in its hearing request and

---

387 *Id.* at 66.

388 *Id.* at 64-67 (citing Trabucchi Decl. ¶ 13-15, 26-32, 35, 43).

389 *See* NRC, LIST OF POWER REACTOR UNITS, https://www.nrc.gov/reactors/operating/list-power-reactor-units.html (Braidwood 1 & 2, Brunswick 1 & 2, Byron 1 & 2, Catawba 1 & 2, Clinton, Comanche Peak 1 & 2, Dresden 2 & 3, Duane Arnold, FitzPatrick, Hope Creek 1, LaSalle 1 & 2, Limerick 1 & 2, McGuire 1 & 2, Oconee 1, 2, & 3, Peach Bottom 2 & 3, Point Beach 1 & 2, Quad Cities 1 & 2, Robinson 2, Salem 1 & 2, Seabrook 1, Shearon Harris 1, Susquehanna 1 & 2).

390 *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 (June 20, 2019) (ML19095A463).

391 Petition at 67.

petition to intervene.[392] As explained in further detail in Applicants' answer thereto (which Applicants incorporate by reference here), such claims are inadmissible for multiple reasons.[393] Broadly speaking, the Commission has consistently rejected generic assertions, such as this one, related to large companies' conduct of business activities that are not directly connected to the licensed activities in question.[394] Thus, the State's claim here likewise fails to supply an admissible basis for Proposed Contention NY-3.

* * *

In summary, Proposed Contention NY-3 fails to raise issues within the scope of this proceeding, fails to raise a material issue, is unsupported by facts or expert opinions, and does not show that a genuine dispute exists with the Application on a material issue of law or fact as required by 10 C.F.R. §§ 2.309(f)(1)(iii)-(vi). For these reasons, the Commission should reject Proposed Contention NY-3 as inadmissible.

## VII. CONCLUSION

As established above, NYS has 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.

---

392 Petition of Riverkeeper, Inc. to Intervene and for a Hearing at 9-20 (Feb. 12, 2020) (ML20043F530) (proposed contention making the generalized, spurious, and unsupported claim that the Holtec LLCs lack the "character, competence, and integrity, as well as the necessary candor, truthfulness and willingness to abide by NRC regulatory requirements.").

393 *See generally* Answer Opposing Riverkeeper, Inc.'s Petition to Intervene and for a Hearing § III (Mar. 9, 2020).

394 *See id.* § III.A.

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

*Counsel for Holtec International and*
*Holtec Decommissioning International, LLC*

*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

*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 State of New York" 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*