# UNITED STATES OF AMERICA NUCLEAR ENERGY REGULATORY COMMISSION

#### **BEFORE THE SECRETARY**

:

In the Matter of

: Docket Nos.

ENTERGY NUCLEAR OPERATIONS, INC.; : 50–003 ENTERGY NUCLEAR INDIAN POINT 2, LLC; : 50–247 ENTERGY NUCLEAR INDIAN POINT 3, LLC; : 50–286 HOLTEC INTERNATIONAL; AND HOLTEC : 72–051

DECOMMISSIONING INTERNATIONAL, LLC; :

CONSIDERATION OF APPROVAL OF : TRANSFER AND CONTROL OF LICENSES :

:

(Indian Point Nuclear Generating Station)

AND CONFORMING AMENDMENTS

TOWN OF CORTLANDT, VILLAGE OF BUCHANAN, AND HENDRICK HUDSON SCHOOL DISTRICT'S PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST

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## **TABLE OF CONTENTS**

TABLE OF AUTHORITIES	iv
PETITIONERS	1
INTRODUCTION	3
STANDING	7
PETITIONERS PRESENT TWO CONTENTIONS THAT MEET THE REQUIREMENTS OF 10 C.F.R. § 2.309(f) AND SO ARE ADMISSIBLE	
CONTENTION I	10
The Applicants Failed to Provide Sufficient Evidence to Demonstra Application Is Approved, There Will Be a Reasonable Assurance of Protection for Public Health and Safety, as Required by 42 U.S.C. §	Adequate
A. The Applicants' PSDAR Contains Several Untenable Assu Which Could Result in Costs Overruns that Drain the Decommi	issioning Trust Fund
B. Absent Additional Assurances, Holtec's Corporate Structu Assets or Revenue Streams Makes Holtec Financially Unfit to D Point	ecommission Indian
C. The License Transfer Application, Forthcoming Exemption PSDAR Incentivize Holtec to Cut Corners, Resulting in Signification, and Environmental Risks	ant Public Health,
CONTENTION II	32
The Applications Do Not Include the Environmental Review Require Environmental Policy Act ("NEPA") and NRC Regulations	
A. Regulatory Framework	33
B. The Commission Has Not Completed the Environmental I NEPA	- ·
CONCLUSION	43
CERTIFICATION OF SERVICE	45

CASES PAGE(S)
Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87 (1983)
Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998)
Brodsky v. U.S. Nuclear Regulatory Comm'n, 704 F.3d 113 (2d Cir. 2013)
Calvert Cliffs' Coordinating Comm., Inc. v. U. S. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971)
Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172 (9th Cir. 2008)
Coal. of Concerned Citizens to Make Art Smart v. Fed. Transit Admin. of U.S. Dep't of Transportation, 843 F.3d 886 (10th Cir. 2016)
Delaware Riverkeeper Network v. F.E.R.C., 753 F.3d 1304 (D.C. Cir. 2014)37
Dep't of Trans. v. Public Citizen,         541 U.S. 752 (2004)
Found. on Econ. Trends v. Heckler, 756 F.2d 143 (D.C. Cir. 1985)
Friends of Back Bay v. U.S. Army Corps of Engineers, 681 F.3d 581 (4th Cir. 2012)
In re Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Servs., LLC, 72 N.R.C. 720 (Dec. 28, 2010)
In re Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Servs., LLC (Combined License Application for Calvert Cliffs Unit 3), 69 N.R.C. 170, 190 (Mar. 24, 2009)
<i>In re Entergy Nuclear Vermont Yankee, LLC, And Entergy Nuclear Operations, Inc.,</i> No. 15-940-03-LA-BD01, 2015 WL 5883370 (Aug. 31, 2015), <i>vacated as moot,</i> 83 N.R.C. 463, 2016 WL 8260626 (June 2, 2016)14, 18, 30, 31, 38

CASES	GE(S)
<i>In re Exelon Generation Co., LLC</i> , Docket Nos. 50-219-LT, 72-015-LT, 2019 WL 2632851 (June 18, 2019)	7
In re Gulf States Utilities Co., et al. (River Bend Station, Unit 1), 40 N.R.C. 43 (Aug. 23, 1994)	24, 28
In re Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 & 4), 70 N.R.C. 311 (Aug. 6, 2009)	9
In re Pa'ina Hawaii, LLC, 63 N.R.C. 99 (Jan. 24, 2016)	39
In re S. Nuclear Operating Co. (Vogtle Elec. Generating Plant, Units 3 & 4), 69 N.R.C. 139, 161 (Mar. 5, 2009)9,	16, 19
In re S. Nuclear Operating Co., Inc. (Vogtle Elec. Generating Plant, Units 3 & 4), 83 N.R.C. 259 (Apr. 29, 2016)	8
In re Wrangler Labs., Larsen Labs., Orion Chem. Co., & John P. Larsen, 33 N.R.C. 505 (June 25, 1991)	30
Kleppe v. Sierra Club, 427 U.S. 390 (1976)	33
Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1989)	41
Nat'l Audubon Soc. v. Hoffman, 132 F.3d 7 (2d Cir. 1997)	35
Nat. Res. Def. Council, Inc. v. F.A.A., 564 F.3d 549 (2d Cir. 2009)	33
New York v. Nuclear Regulatory Comm'n, 681 F.3d 471 (D.C. Cir. 2012)	24
Nuclear Energy Inst., Inc. v. Envtl. Prot. Agency, 373 F.3d 1251 (D.C. Cir. 2004)	15
Pogliani v. U.S. Army Corps of Eng'rs, 306 F.3d 1235 (2d Cir. 2002)	41

CASES	PAGE(S)
Ramsey v. Kantor, 96 F.3d 434 (9th Cir. 1996)	41
San Luis Obispo Mothers for Peace v. U.S. Nuclear Regul 799 F.2d 1268 (9th Cir. 1986)	
Sierra Club v. Marsh, 769 F.2d 868 (1st Cir. 1985)	34
Town of Huntington v. Marsh, 859 F.2d 1134 (2d Cir. 1988)	37
<i>Tri-Valley CAREs v. U.S. Dep't of Energy</i> , 671 F.3d 1113 (9th Cir. 2012)	34
STATUTES	
42 U.S.C. § 2201	29
42 U.S.C. § 2232	passim
42 U.S.C. § 2234	29
42 U.S.C. § 2239	7, 8
42 U.S.C. § 4321	33
42 U.S.C. § 4332	33
REGULATIONS	
10 C.F.R. § 2.309(d)	7
10 C.F.R. § 2.309(f)	passim
10 C.F.R. § 2.309(h)(2)	1, 7
10 C.F.R. § 30.34	30
10 C.F.R. § 40.41	30

REGULATONS	PAGE(S)
10 C.F.R. § 50.33(f)	11, 12, 19, 28, 43
10 C.F.R. 50.54(bb)	5
10 C.F.R. § 50.75(h)	11, 30, 43
10 C.F.R. § 50.80(a)	11
10 C.F.R. § 50.80(b)(1)	11
10 C.F.R. § 50.80(c)	11, 22
10 C.F.R. § 50.82(a)(4)(i)	passim
10 C.F.R. § 50.82(a)(8)(i)(A)	4, 5, 28, 29
10 C.F.R. § 50.85(a)(8)(i)(B)	passim
10 C.F.R. § 50.85(a)(8)(i)(C)	passim
10 C.F.R. § 50.82(a)(8)(vii)	5
10 C.F.R. § 51.22(b)	39
10 C.F.R. § 51.22(c)(21)	6, 35, 36, 39, 43
10 C.F.R. § 70.32	30
10 C.F.R. § 961.11	15
40 C.F.R. § 1500.1(a)	33
40 C.F.R. § 1500.1(c)	33
40 C.F.R. § 1501.4	35, 42
40 C.F.R. § 1502.1	33
40 C F D 8 1507 2(b)(2)	25

REGULATIONS PAGE(S)
40 C.F.R. § 1508.4
40 C.F.R. § 1508.9
40 C.F.R. § 1508.13
40 C.F.R. § 1508.14
40 C.F.R. § 1508.18
40 C.F.R. § 1508.25(a)
REGISTER NOTICES
49 Fed. Reg. 9,352, 8,377 (Mar. 12, 1984)
53 Fed. Reg. 24,018, 24,037 (June 27, 1988), General Requirements for Decommissioning Nuclear Facilities
54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989), Final Rule, Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process
63 Fed. Reg. 66,721, 66,728 (Dec. 3, 1998), Streamlined Hearing Process for NRC Approval of License Transfers
REGISTER NOTICES
64 Fed. Reg. 24,426, 24,427 (May 6, 1999), Order Approving Transfer of Licenses and Conforming Amendments
79 Fed. Reg. 56,238, 56,245 (Sept. 19, 2014), Continued Storage of Spent Nuclear Fuel

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Storage of Spent Nuclear Fuel (Sept. 2014)
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Decommissioning of Nuclear Facilities, Supplement 1 (Nov. 2002)
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#### **PETITIONERS**

- 1. Petitioners, the Town of Cortlandt, the Village of Buchanan, and the Hendrick Hudson School District are all organized under the laws of New York. All are local governmental bodies with the meaning of 10 C.F.R. § 2.309(h)(2), and all will be adversely affected by the proposed license transfer from Entergy Nuclear Operations, Inc. ("Entergy") to an independent entity, Holtec International ("Holtec"). <sup>1</sup>
- 2. The Indian Point Energy Center ("Indian Point" or "IPEC") is within the taxing and geographic jurisdictions of each of the petitioners, and constitutes a large land mass, approximately 240 acres, within the borders of the Petitioners.
- 3. The Town of Cortlandt is located in the northwestern corner of Westchester County. With a total area of 34.5 square miles and an estimated population of 31,292, the Town is bounded on the west by the Hudson River, the north by Putnam County, the east by the Town of Yorktown, and on the south by the Towns of New Castle and Ossining. Cortlandt includes two incorporated villages, Croton-on-Hudson and Buchanan, along with several hamlets including Montrose, Crugers and Verplanck. The Town of Cortlandt receives a Payment in Lieu of Taxes from Entergy.
- 4. The Village of Buchanan is situated in the northwestern corner of Westchester County on the eastern bank of the Hudson River. Located within the Town of Cortlandt, the Village covers 1.4 square miles and has an estimated population of 2,265 as of 2016. Buchanan hosts the Indian Point facility, for which it receives a significant Payment in Lieu of Taxes from Entergy.

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<sup>&</sup>lt;sup>1</sup> In this Petition, Entergy refers to Entergy Nuclear Operations, Inc., Entergy Nuclear Indian Point 2, LLC, and Entergy Nuclear Indian Point 3, LLC, and Holtec refers to Holtec International and Holtec Decommissioning International, LLC.

- 5. The Hendrick Hudson School District is one of the highest-performing public school districts in Westchester County and New York State. With 2,324 K-12 students across five schools, the School District maintains a low 11 to 1 student-teacher ratio and a 93% graduation rate. Students are offered a comprehensive program of honors and Advanced Placement courses, special education services, a band and orchestra, 40 interscholastic sports teams, and numerous extracurricular activities. Hendrick Hudson School District also receives a Payment in Lieu of Taxes from Entergy.
- 6. Petitioners constitute the community surrounding Indian Point. Therefore, mishaps in decommissioning, unforeseen circumstances, and miscalculations on the amount of money available to return Indian Point to productivity will have a direct effect on that community.
- 7. The direct potential adverse impacts upon these communities from the closure of Indian Point is 3-fold. First, each of these communities are dependent on the taxes generated by the IPEC and have been able to rely on the Indian Point facility due to its assets and stream of income.
- 8. Petitioners face an annual loss of \$32 million dollars in taxes arising from such unfortunate events. The annual payments of taxes or Payments in Lieu of Taxes for those municipalities and other entities in the Indian Point area is shown below:

Village of Buchanan \$3.5 million – 47% of annual budget

Town of Cortlandt \$1 million – 2% of budget

Hendrick Hudson School District \$23 million – 1/3 of budget

Westchester County \$4 million – 1% of budget

Hendrick Hudson Free Library \$394,110 – 28% of budget

Verplanck Fire District \$372,703 – 64% of budget

- 9. The loss of real estate taxes or Payments in Lieu of Taxes is only one aspect of the economic and environmental loss that may befall the Petitioners if the present License Transfer Applications are granted without sufficient modification and/or alteration as set forth below. In addition, an unremediated or partially remediated IPEC presents significant radiological and non-radiological concerns, which could cause substantial environmental and public health impacts. These concerns are amplified by the genuine risk, outlined in detail below, that the Decommissioning Trust Fund<sup>2</sup> will be depleted if Holtec is permitted to take over the IPEC.
- 10. Finally, a closed, unremeditated, or partially remediated nuclear generating plant will be a blight on the surrounding community, adversely affecting property values and future development. Petitioners, with State assistance, have conducted studies that demonstrate that a prompt, careful and complete remediation of the Indian Point site is needed to maintain the current level of services in these communities, and to avoid the syndrome of falling property value. Any delay that fails to return Indian Point to productive use will create a drain on the local community.
- 11. In sum, Petitioners have a substantial and ongoing interest in a prompt, safe, and complete decommissioning of the IPEC.

#### INTRODUCTION

12. Petitioners the Town, Village and School District request that the U.S. Nuclear Regulatory Commission (the "NRC" or "Commission") permit Petitioners to intervene in this proceeding and grant the Petitioners' request for an adjudicatory hearing on Entergy and Holtec's License Transfer Application ("LTA"), Holtec's unconditioned Forthcoming Exemption Request to use Indian Point's Decommissioning Trust Fund for site restoration and spent fuel management

<sup>&</sup>lt;sup>2</sup> In this Petition, the Decommissioning Trust Fund or DTF refers collectively to the decommissioning trust funds for Indian Point Unit 1, Indian Point Unit 2, and Indian Point Unit 3.

costs, and Holtec's Post-Shutdown Decommissioning Activities Report ("PSDAR") and Site-Specific Cost Estimate (collectively, the "Applications").

- 13. Initially, the Commission cannot consider or grant the License Transfer Application in its current form because Holtec has not submitted the Forthcoming Exemption Request or analyzed its financial and environmental consequences. In the License Transfer Application and PSDAR, Holtec repeatedly states that it plans to seek an exemption from 10 C.F.R. § 50.82(a)(8)(i)(A) to allow Holtec to use the DTF for non-decommissioning activities, including spent fuel management and site restoration. Approval of this exemption is indispensable to Holtec's Decommissioning Cost Estimate. As Holtec explains: "because HDI's funding plan for spent fuel management and site restoration activities relies on the use of [the DTF], HDI plans to request an exemption to allow HDI to use a portion of the [trust] funds for these activities." See Application Cover Letter at 4; see also License Transfer Application at 18 (noting exemption request will be "submit[ed] separately from this Application"); PSDAR at 2 ("In addition, HDI will submit a request for NRC approval of an exemption to use [the Decommissioning Trust Fund] for spent fuel management and site restoration activities."). Despite its central importance to the License Transfer Application, Holtec has not yet submitted the Forthcoming Exemption Request or analyzed its impacts on the environment or the stability of the DTF. Accordingly, the LTA is incomplete and should be re-noticed in the Federal Register upon submission of the Forthcoming Exemption Request to enable fulsome public comment on the Applications as a whole. At a minimum, the Forthcoming Exemption Request is an integrally related component of the larger License Transfer Application and must be considered in conjunction therewith.
- 14. As a general matter, Petitioners support the concept of a prompt, environmentally sound decontamination and restoration of the IPEC to return the Site to productive use. However,

as the representatives of the communities most affected by the retirement of the IPEC, Petitioners will bear the brunt of the financial, environmental, and public health and safety consequences of a funding shortfall. Accordingly, Petitioners have a significant interest in ensuring that Holtec has the financial and technical capabilities to safely decommission the IPEC, restore the Site to productive use, and manage the spent nuclear fuel onsite — possibly indefinitely.

facility must be decommissioned, a term that refers to the process of removing a facility or site safely from service and reducing residual radioactivity to a level that permits release of the property for unrestricted use. *See* 10 C.F.R. 50.2. Decommissioning includes decontamination and dismantling of equipment and facilities and demolition of buildings and structures.<sup>3</sup> In addition to decommissioning expenses, retirement of a nuclear facility also includes the cost of spent fuel management — a cost borne by the entity that holds title to the spent fuel — along with the cost of site restoration.<sup>4</sup> Holtec states that it will cover all of these costs by drawing down the Decommissioning Trust Fund for the IPEC and so seeks an exemption from 10 C.F.R. § 50.82(a)(8)(i)(A), which would otherwise mandate that trust funds may only be used for decommissioning-related expenses. This, along with several other aspects of the proposed transfer, raises significant concerns about the financial qualifications of the Holtec subsidiaries that will hold the owner and operator licenses for the IPEC.

<sup>&</sup>lt;sup>3</sup> Int'l Atomic Energy Agency, Safety Reports Series No. 77, Safety Assessment for Decommissioning 17 (2013), <a href="https://www-pub.iaea.org/MTCD/publications/PDF/Publ604\_web.pdf">https://www-pub.iaea.org/MTCD/publications/PDF/Publ604\_web.pdf</a>.

<sup>&</sup>lt;sup>4</sup> See, e.g., 10 C.F.R. 50.54(bb) (requiring licensee to submit to NRC "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 title to the irradiated fuel and possession of the fuel is transferred to the Secretary of Energy for its ultimate disposal in a repository"); 10 C.F.R. § 50.82(a)(8)(vii) (requiring licensee to submit annual reports on "funds accumulated to cover the cost of managing the irradiated fuel" and the "projected cost of managing irradiated fuel until title to the fuel and possession of the fuel is transferred to the Secretary of Energy").

- 16. Petitioners raise several contentions that identify specific regulatory requirements for which Entergy and Holtec have failed to present sufficient evidence of compliance. The Petitioners first contend that there is a genuine dispute as to whether Holtec has the financial qualifications to safely decommission the IPEC, restore the site, and manage the spent fuel onsite. Specifically, the Applicants have not demonstrated that the Decommissioning Trust Fund, standing alone and in light of Holtec's Forthcoming Exemption Request,<sup>5</sup> will provide the adequate financial assurances required by the Atomic Energy Act ("AEA") and the Commission's Those concerns are heightened by the fact that Holtec has ignored specific, regulations. identifiable contingencies that, if included, would likely result in a substantial shortfall in the trust fund. The prospect of a funding shortfall poses radiological, environmental, and financial risks to Petitioners. If, for example, the DTF is insufficient to cover all of Holtec's costs, there is no guarantee that Holtec will not simply declare bankruptcy and walk away, leaving Petitioners and their residents to pick up the tab. Moreover, the brunt of any environmental harm caused by this shortfall will be felt most acutely by Petitioners and their citizens. On the current record, the Commission cannot find, as it must, that the License Transfer Application would "provide adequate protection to the health and safety of the public." 42 U.S.C. § 2232(a).
- 17. Petitioners also contend that the Commission must conduct, at a minimum, an environmental assessment of the potential direct and indirect environmental consequences of the proposed action, i.e., the combined effect of the LTA, the Forthcoming Exemption Request, and the Revised PSDAR. In particular, special circumstances preclude reliance on the categorical exclusion in 10 C.F.R. § 51.22(c)(21) for ordinary, non-substantive license transfers because the

<sup>5</sup> The Forthcoming Exemption Request, if allowed in its current form, would allow Holtec to effectively syphon approximately \$765 million from the DTF to cover spent fuel management and site restoration costs without any commitment from Holtec to return the balance of the DTF to the local community.

Forthcoming Exemption Request ignores the potential environmental consequences of a resulting shortfall in the Fund. Additionally, new and significant information, namely, the potential environmental consequences of climate change, indicate that the environmental risks posed by the decommissioning of Indian Point are not bounded by the 2002 Generic Environmental Impact Statement ("GEIS") or the 2018 Indian Point Site-Specific Supplemental Environmental Impact Statement ("SEIS"), requiring that the Commission prepare a supplemental Environmental Impact Statement. The Commission's action on the LTA, Exemption Request, and Revised PSDAR constitutes a major federal action and the NRC must therefore conduct an environmental review.

18. These matters are within the scope of the proceeding and material to the findings the NRC must make to support the proposed license transfer and amendment. Both contentions meet the requirements of 10 C.F.R. § 2.309(f) and so are admissible. The Atomic Energy Act, the Administrative Procedure Act ("APA"), and the National Environmental Policy Act ("NEPA") require a hearing to address these and other issues discussed below.

#### **STANDING**

Petitioners have standing because Indian Point is "located with the boundaries of the . . . local governmental body . . . seeking to participate as a party." 10 C.F.R. § 2.309(h)(2) Accordingly, "no further demonstration of standing [under 10 C.F.R. § 2.309(d)] is required." *Id.*; see also, e.g., In re Exelon Generation Co., LLC (Oyster Creek Nuclear Generating Station), Docket Nos. 50-219-LT, 72-015-LT, 2019 WL 2632851 (June 18, 2019).

# PETITIONERS PRESENT TWO CONTENTIONS THAT MEET THE REQUIREMENTS OF 10 C.F.R. § 2.309(f) AND SO ARE ADMISSIBLE

19. Section 189 of the Atomic Energy Act, 42 U.S.C. § 2239, "sets forth the hearing framework for the amendment of licenses for nuclear power plants." *San Luis Obispo Mothers for* 

Peace v. U.S. Nuclear Regulatory Comm'n, 799 F.2d 1268, 1269 (9th Cir. 1986). Specifically, Section 189(a)(1)(A) states that "[i]n any proceeding . . . for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, . . . 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." 42 U.S.C. § 2239(a)(1)(A) (emphasis added). Applied here, the Commission is required by law to grant the Petition to intervene and for a hearing because the Applicants seek to "transfer control" of Indian Point from Entergy to Holtec and to "modif[y]" the Commission's "rules and regulations" by granting an exemption that would permit Holtec to withdraw funds from the DTF for non-decommissioning activities. Id.

20. "Commission regulations mandate that a contention include a specific statement of the issue of law or fact to be raised or controverted, a brief explanation of the bases of the contention, and a concise statement of the alleged facts or expert opinion that support the contention, together with references to those specific sources and documents on which the petitioner intends to rely to prove the contention." *In re Gulf States Utilities Co., et al. (River Bend Station, Unit 1)*, 40 N.R.C. 43, 51 (Aug. 23, 1994); *see also In re S. Nuclear Operating Co., Inc. (Vogtle Elec. Generating Plant, Units 3 & 4)*, 83 N.R.C. 259, 282 (Apr. 29, 2016) ("[The contention] requirement generally is fulfilled when the sponsor of an otherwise acceptable contention provides a brief recitation of the factors underlying the contention or references to documents and texts that provide such reasons."); 10 C.F.R. § 2.039(f). Notably, a contention may be based on factual allegations alone. *See* 10 C.F.R. § 2.039(f)(1)(v) (requiring a petitioner to "[p]rovide a concise statement of the alleged facts *or* expert opinions which support the

requestor's/petitioner's position" (emphasis added)); *In re Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), 70 N.R.C. 311 (Aug. 6, 2009) ("[T]he Commission has interpreted subsection (v), quite reasonably and simply, to require a petitioner to support its contentions with documents, expert opinion, or at least a fact-based argument." (internal quotation marks and alterations omitted)).<sup>6</sup>

- 21. A petitioner must ultimately "demonstrate that a genuine dispute exists with the applicant on a material issue of law or fact." *In re Gulf States*, 40 N.R.C. at 43. However, in a case asserting errors of omission, a petitioner "need only identify the regulatively required missing information and provide enough facts to show that the application is incomplete." *In re S. Nuclear Operating Co. (Vogtle Elec. Generating Plant, Units 3 & 4)*, 69 N.R.C. 139, 161 (Mar. 5, 2009) (internal citations and alterations omitted). Put another way, "if the contention alleges that the application omits information required by law, it necessarily presents a genuine dispute with the Applicant on a material issue in compliance with 10 C.F.R. § 2.309(f)(1)(vi) and raises an issue plainly material to an essential finding of regulatory compliance needed for license issuance." *In re Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Servs., LLC (Combined License Application for Calvert Cliffs Unit 3)*, 69 N.R.C. 170, 190 (Mar. 24, 2009) (internal quotation marks and alterations omitted).
- 22. The contention rule is not designed to be unduly restrictive. The rule "does not require [Petitioners] to prove [their] case" at the contention stage, *In re Gulf States*, 40 N.R.C. at 51, nor does it "shift the ultimate burden of proof from the applicant to the petitioner," *In re Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Servs., LLC*, 72 N.R.C. at 756–57

<sup>&</sup>lt;sup>6</sup> Indeed, the Commission has often granted petitions to intervene that did not include an expert opinion. See, e.g., In re Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Servs., LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), 72 N.R.C. 720, 756–57 (Dec. 28, 2010).

(internal quotation marks omitted). "[T]he factual support necessary to show that a genuine dispute exists need not be in formal evidentiary form, nor be as strong as that necessary to withstand a summary disposition motion." *In re Gulf States*, 40 N.R.C. at 51. Rather, all that is required is "a minimal showing that material facts are in dispute, thereby demonstrating that an 'inquiry in depth' is appropriate." *Id.* at 51, 53 (internal quotation marks omitted) (quoting Final Rule, Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989)).

23. Viewing the evidence "in a light favorable to" Petitioners, as the Commission must at this stage, *id.* at 53, Petitioners have identified two admissible contentions under 10 C.F.R. § 2.309(f). These contentions are self-evident based on unreasonable and unsupported assumptions in the Applications and other generally accepted facts. Both contentions are within the scope of this proceeding because they go to the technical and financial qualifications of the applicant and whether the Commission has conducted the necessary environmental review to approve the Applications. The Commission must therefore grant the Petition and promptly schedule hearing on the issues raised herein.

#### **CONTENTION I**

The Applicants Failed to Provide Sufficient Evidence to Demonstrate That, if the Application Is Approved, There Will Be a Reasonable Assurance of Adequate Protection for Public Health and Safety, as Required by 42 U.S.C. § 2232(a)

24. Section 182(a) of the Atomic Energy Act requires a license applicant to prove that it possesses adequate financial assurances to protect public health and safety. 42 U.S.C. § 2232(a). The Applicants have failed to do so. Specifically, the License Transfer Application, Forthcoming Exemption Request, and PSDAR do not demonstrate that Holtec possesses the necessary technical

and financial qualifications to ensure "adequate protection to the health and safety of the public," as required by the Atomic Energy Act, 42 U.S.C. § 2232(a), and its implementing regulations, 10 C.F.R. § 50.82(a)(8)(i)(B) and (C), and 10 C.F.R. § 50.75(h)(1)(iv). These issues are material to the findings the NRC must make to support the action involved in the proceeding. Petitioners request a hearing before the Commission to address these and other issues.

## A. The Applicants' PSDAR Contains Several Untenable Assumptions, Any of Which Could Result in Costs Overruns that Drain the Decommissioning Trust Fund

- 25. The transfer of operating licenses requires the consent of the Commission. 10 C.F.R. § 50.80(a) ("No license for a production or utilization facility . . . shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission gives its consent in writing."). To grant an application, the Commission must determine "[t]hat the proposed transferee is qualified to be the holder of the license" and that the transfer "is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto." *Id.* § 50.80(c); *see also* 10 C.F.R. § 50.33(f) (requiring an applicant to provide "information sufficient to demonstrate to the Commission the financial qualification of the applicant"); 10 C.F.R. § 50.80(b)(1).
- 26. The License Transfer Request, Forthcoming Exemption Request, and PSDAR fail that test because Holtec has not demonstrated its qualifications to hold the licenses to own and operate the IPEC. Additionally, the transfer is not consistent with the Atomic Energy Act or its implementing regulations.
- 27. Specifically, the License Transfer Request, Forthcoming Exemption Request, and PSDAR do not comply with 10 C.F.R. § 50.82(a)(8)(i)(B) and (C). Those provisions state that a decommissioning trust fund may only be used by a licensee if "[t]he expenditure would not reduce

the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise," § 50.82(a)(8)(i)(B), and if "[t]he withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license," *id.* § 50.82(a)(8)(i)(C). In addition, Holtec has failed to "submit information that demonstrates the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license." 10 C.F.R. § 50.33(f)(2).

### Holtec's Assumption that DOE Will Accept Spent Nuclear Fuel by 2030 Is Baseless

- 28. Holtec's Decommissioning Cost Estimate, contained in the PSDAR, rests in large part on a single assumption: that the Department of Energy ("DOE") will begin accepting spent nuclear fuel by 2030. *See* PSDAR at 64. This assumption, for which Holtec offers no evidentiary support, carries through each of Holtec's Decommissioning Funding Cash Flow Analyses, found at Tables 5-1a, 5-1b, and 5-1c of the PSDAR. But this assumption withers under the slightest scrutiny, and without it, Holtec's financial qualifications become suspect at best.
- 29. The notion that DOE will begin accepting spent nuclear fuel from the IPEC by 2030 is a fantasy, and Holtec's own justification for this assumption proves as much. In the PSDAR, Holtec identifies DOE's 2013 report, "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste," which described DOE's ambition to develop a pilot interim storage facility for shuttered reactor sites that would open by 2021, with a larger facility to be available by 2025. But as Holtec concedes, "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." PSDAR at 64. And Congress has appropriated no funding to restart the

Yucca Mountain licensing process.<sup>7</sup> Despite this complete lack of progress, Holtec bafflingly maintains that "[b]ecause of this continued delay, this DCE assumes a start date for DOE fuel acceptance of 2030." *Id.* Having offered no evidence to support this assumption, it appears Holtec has plucked this date out of thin air.

30. Not only does Holtec's own Application demonstrate that this assumption is baseless, generally accepted facts suggest that on-site nuclear fuel management may be required for *decades* longer than Holtec suggests.<sup>8</sup> In fact, the NRC's Continued Storage Rule explicitly acknowledges that spent fuel may be stored on-site for hundreds of years, if not indefinitely.<sup>9</sup> Even in what NRC has called the "most likely scenario," spent fuel would be stored onsite for "60 years . . . after the end of a reactor's licensed life for operation." Holtec's Decommissioning Cost Estimate fails to even mention these facts, much less calculate alternative cost projections if its baseless assumption turns out to be incorrect.

31. This error is no small matter — it has enormous consequences for Holtec's entire decommissioning cost estimate. To see why this is so, consider Holtec's projected costs for spent nuclear fuel management. Based on the fanciful notion that the DOE will begin accepting spent fuel by 2030, Holtec estimates that "IP2 spent fuel removal will begin in 2031 and complete in 2048," that "IP1 spent fuel removal will begin in 2048 and complete in 2049," and that "IP3 spent fuel removal will begin in 2049 and complete in 2061." PSDAR at 64. These assumptions are

<sup>&</sup>lt;sup>7</sup> See Congressional Research Service, Civilian Nuclear Waste Disposal at 17 (Sept. 2018), <a href="https://fas.org/sgp/crs/misc/RL33461.pdf">https://fas.org/sgp/crs/misc/RL33461.pdf</a>.

<sup>&</sup>lt;sup>8</sup> U.S. Gov't Accountability Office, Disposal of High-Level Nuclear Waste, <a href="https://www.gao.gov/key\_issues/disposal\_of\_highlevel\_nuclear\_waste/issue\_summary#t=0">https://www.gao.gov/key\_issues/disposal\_of\_highlevel\_nuclear\_waste/issue\_summary#t=0</a>.

<sup>&</sup>lt;sup>9</sup> See Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,238, 56,245 (Sept. 19, 2014) (describing a long-term scenario, which assumes continued storage for 160 years, and an indefinite scenario, which assumes no final repository becomes available).

<sup>&</sup>lt;sup>10</sup> *Id*.

then reflected in Holtec's Decommissioning Funding Cash Flow Analyses. Specifically, Holtec estimates that spent fuel management costs will <u>drop to zero</u> for IP1 and IP2 in 2048, and then <u>drop to zero</u> for IP3 in 2063. Crucially, Holtec has offered <u>no alternative calculation</u> for its ongoing spent fuel management costs if this assumption turns out to be incorrect.

32. Without an alternative cash flow analysis from Holtec, the NRC and the public are left to guess what impact this assumption has on the stability of the DTF and Holtec's ability to safely decommission the IPEC. However, even a cursory review of Holtec's own projections illustrate that this assumption could easily bankrupt the DTF. As shown in Chart 1 below, Holtec's own figures provide for an average annual fuel management cost of approximately \$2.7 million at IP Unit 1, \$\frac{\pi}{2}\$ million at IP Unit 2, and \$\frac{\pi 8.8}{2}\$ million at IP Unit 3, for a total of approximately \$\frac{\pi 18.5}{2}\$ million per year on spent fuel management across the three units. Accordingly, if DOE is unable to accept spent nuclear fuel until 2040 — i.e., a ten-year delay beyond Holtec's estimate — Holtec's spent fuel management costs could increase by \$185 million. Another ten-year delay would bring that figure to nearly \$370 million, single-handedly wiping out the remainder of the DTF. And that's not all. In a long-term or indefinite spent fuel storage scenario, which the NRC has found entirely possible based on the progress of the DOE's long-term repository plans, the NRC has stated that each reactor operator will be required to build a dry transfer system to move spent fuel into new dry casks every 100 years. 11 Even if DOE eventually accepts the spent fuel, Holtec has also failed to account for the cost of repackaging spent fuel at the IPEC for delivery to DOE, which is a licensee's responsibility under the standard contract for disposal of spent nuclear

<sup>&</sup>lt;sup>11</sup> See Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. at 56,245; see also In re Entergy Nuclear Vermont Yankee, LLC, And Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), No. 15-940-03-LA-BD01, 2015 WL 5883370, at \*12 (Aug. 31, 2015), vacated as moot, 83 N.R.C. 463, 2016 WL 8260626 (June 2, 2016) ("[I]ndefinite storage of spent fuel on-site is a very possible outcome").

fuel. 12 Yet Holtec makes no effort to account for these costs, to say nothing of the cost of long-term security and maintenance of the spent fuel storage facilities.

Chart 1 (Cost in Thousands)

	IP1	IP2	IP3	Total IPEC
Average Annual Spent Fuel Management Cost	\$2,681.85	\$6,973.22	\$8,841.98	\$18,497.05
Median Annual Spent Fuel Management Cost	\$2,870.00	\$6,000.00	\$4022.5	\$12,892.50
Average Annual Cost in Final 10 Years	\$3,247.50	\$5,189.10	\$10,980.90	\$19,417.50
Median Annual Cost in Final 10 Years	\$2,870.00	\$6,000.00	\$11,927.00	\$20,797.00

33. Thus, if DOE fails to accept all spent nuclear fuel on Holtec's arbitrary schedule, Holtec's own analysis suggests that it will incur significant and ongoing cost overruns for spent fuel management, which could total hundreds of millions of dollars and bankrupt the DTF. Indeed, if Holtec is unable to make those payments due to dwindling funds in the DTF — again, its only source of funding to cover spent fuel management costs — Petitioners or the State of New York will either have to pick up the tab or face the dire environmental and public health consequences caused by mismanagement of highly radioactive material. *See, e.g., Nuclear Energy Inst., Inc. v. Envtl. Prot. Agency*, 373 F.3d 1251, 1258 (D.C. Cir. 2004) (noting that "[a]t massive levels, radiation exposure can cause sudden death," and even "[a]t lower doses, radiation can have devastating health effects, including increased cancer risks and serious birth defects"). These

<sup>&</sup>lt;sup>12</sup> 10 C.F.R. § 961.11.

environmental and public safety risks will be substantially borne by Petitioners and the local communities they represent.

34. Because Holtec's spent fuel management cost assumptions are untenable, Holtec cannot demonstrate that its withdrawals from the DTF "would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise," 10 C.F.R. § 50.82(a)(8)(i)(B), or "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," § 50.82(a)(8)(i)(C). Moreover, the failure to provide alternative decommissioning cost estimates based on different timelines for DOE's acceptance of spent fuel renders the Applications facially incomplete. For contentions of omission, a petitioner "need only identify the regulatively required missing information and provide enough facts to show that the application is incomplete." In re S. Nuclear Operating Co., 69 N.R.C. at 161 (internal citations and alterations omitted). This faulty assumption alone demonstrates that transferring the IPEC to Holtec for decommissioning does not provide adequate financial assurances to protect public health and safety. 42 U.S.C. § 2232(a).

### Holtec has not Accounted for Unanticipated Costs

35. The License Transfer Application, Forthcoming Exemption Request, and PSDAR also do not comply with the Commission's regulations because Holtec has failed to account for several significant, unanalyzed cost overrun scenarios. These costs include, at a minimum, the discovery of previously unknown radiological or non-radiological contamination and the possibility of a severe radiological incident. These costs, for which Holtec has not accounted,

could result in an unanticipated drain on the DTF, causing significant public health, safety, and environmental risks.

- 36. As with the spent fuel management projections described herein, Holtec's own submissions demonstrate the problem. In the PSDAR, Holtec concedes that it has not performed a detailed site characterization for the IPEC. See PSDAR at 10 (noting "site characterization activities," including "identification, categorization, and quantification of radiologic, regulated, and hazardous wastes" "will be performed during the decommissioning process"). Instead of using on-site analysis to drive its projections, Holtec's remedial cost estimates are based on a "draft Historical Site Assessment" that apparently did not include a detailed on-site study of hazardous and non-hazardous waste at the IPEC Site. Id. at 63. The PSDAR also fails to comply with the Commission's regulations, which require that a PSDAR include "a site-specific [decommissioning cost estimate], including the projected cost of managing irradiated fuel." § 50.82(a)(4)(i) (emphasis added). Until Holtec conducts a full site characterization, including a complete assessment of the extent of radiological and non-radiological contamination in the soil, groundwater, and bedrock, Holtec's cost estimate is entirely speculative and does not account for the foreseeable risk that such costs will outstrip the funds earmarked for remediation and waste disposal.
- 37. Indeed, the PSDAR specifically raises one such cost-overrun scenario but then fails to account for it. As the PSDAR recognizes, "[a] plume of radiologically-contaminated ground water associated with the IP1 and IP2 spent fuel pools was discovered in 2005." PSDAR at 30. The primary contaminants in the plume are tritium and strontium-90, common decay products of nuclear fission. *Id.* Without a site characterization, the full scope of this contamination is unknown. Holtec states that these contaminants are already being addressed as part of a Long-

Term Monitoring Program ("LTMP") overseen by the NRC, and maintains that "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." *Id.* Yet despite acknowledging this known source of contamination, the PSDAR makes no effort to account for the not unlikely scenario that such contamination could prove more significant, and thus more costly to remediate, than Holtec currently perceives.

38. Similar cost overruns are commonplace in nuclear decommissioning operations, and the Commission has already recognized that the potential of such unanticipated costs can prove significant and warrant further consideration in a hearing. In Matter of Entergy Nuclear Vermont Yankee, Entergy filed a license amendment request seeking to "replace plant-specific license conditions related to its decommissioning trust fund" and an exemption from 10 C.F.R. § 50.82(a)(8)(i)(B)–(C), allowing Entergy to expend funds from the trust fund for spent fuel management and site restoration. 13 The State of Vermont filed a petition to intervene and requested a hearing on several contentions, arguing in part that Entergy's cost projections failed to account for unanticipated costs and so failed to comply with 10 C.F.R. § 50.82(a)(8)(i)(B)–(C) and § 182(a) of the Atomic Energy Act. Specifically, Vermont identified the "recent discovery of strontium-90 . . . in the groundwater near Vermont Yankee" as a cost not adequately considered in the PSDAR.<sup>14</sup> On review, the Commission agreed with the State and granted the petition to intervene. In particular, the Commission cited previously unknown discoveries of groundwater and other contamination at the Maine Yankee, Connecticut Yankee, and Yankee Rowe nuclear facilities and recognized that undiscovered contamination "could greatly increase the costs of

<sup>&</sup>lt;sup>13</sup> In re Entergy Nuclear Vermont Yankee, LLC, And Entergy Nuclear Operations, Inc., No. 15-940-03-LA-BD01, 2015 WL 5883370, at \*1.

<sup>&</sup>lt;sup>14</sup> *Id.* at \*11.

decommissioning and site restoration."<sup>15</sup> Indeed, previously unknown radiological contamination at Connecticut Yankee required extensive excavation and remediation that cost over \$55 million and generated significant delay. <sup>16</sup> Holtec's PSDAR similarly does not account for unforeseen expenses, such as costs associated with remediating the known Strontium-90 contamination, which could easily prove more expensive than currently anticipated.

39. Holtec has also failed to adequately account for unforeseen costs associated with remediating non-radioactive contamination at the IPEC. Indeed, as noted above, Holtec's own filings indicate that it has not yet conducted a site characterization at the IPEC, resting its projections instead on what it calls a "draft Historical Site Assessment." See PSDAR at 10, 63. The NRC and the public are left to wonder what that review entailed, but it is startling that Holtec would base its remediation cost projections on nothing more than historical records on a decadesold industrial site. Indeed, Holtec does not even claim to have conducted a *Phase 1* environmental review. Given this glaring deficiency, Holtec's cost estimates associated with remediating nonradiological contamination are necessarily speculative and unsupported, violating several of the NRC's regulatory requirements. See, e.g., 10 C.F.R. §§ 50.82(a)(4)(i) (requiring PSDAR to include "a site-specific [decommissioning cost estimate], including the projected cost of managing irradiated fuel"); 50.82(a)(8)(i)(B)–(C); see also 10 C.F.R. §§ 50.33(f), 50.75(b) and (e)(1)(i); cf. In re S. Nuclear Operating Co., 69 N.R.C. at 161 (noting for contentions of omission, a petitioner "need only identify the regulatively required missing information and provide enough facts to show that the application is incomplete" (internal quotation marks and alterations omitted)). At the very least, the NRC should require that the Applicants conduct a thorough site characterization

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<sup>&</sup>lt;sup>15</sup> *Id.* at \*11 (finding contention regarding unforeseen expenses admissible and granting Vermont's request for a hearing).

<sup>&</sup>lt;sup>16</sup> See EPRI, Connecticut Yankee Decommissioning Experience Report at 9-10 to 9-11 (Nov. 2006).

to document the actual contamination at the IPEC *before* finding that Holtec has provided adequate financial assurances.

40. Moreover, the PSDAR fails to consider the potential costs associated with a radiological incident at the IPEC Site. The NRC has released several reports cataloging the severe consequences of a radiological accident occurring as a result of on-site spent nuclear fuel management. Specifically, the 2002 GEIS on Decommissioning of Nuclear Facilities identifies several categories of risk associated with decommissioning activities, including fuel-related incidents with spent fuel pools.<sup>17</sup> The 2014 GEIS on Continued Storage of Spent Nuclear Fuel similarly considers the ongoing risks associated with spent fuel pool storage and dry cask storage. <sup>18</sup> The 2014 GEIS notes that the transfer of spent fuel to dry cask storage in particular presents a risk human error, including "dropping the cask during handling," which could result in serious environmental consequences. <sup>19</sup> To be sure, the risks associated with such an accident decline once a reactor is retired, but the risk of decommissioning-related incidents at Indian Point is heightened by Holtec's inexperience, aggressive decommissioning timeline, and ongoing incentive to cut corners to speed up the decommissioning process. Even a single radiological event could result in exorbitant costs from delays alone. Yet Holtec has not accounted for such costs. The failure to do so violates 10 C.F.R. § 50.82(a)(8)(i)(B)–(C).

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<sup>&</sup>lt;sup>17</sup> U.S. Nuclear Regulatory Commission, Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, Supplement 1 (Nov. 2002).

<sup>&</sup>lt;sup>18</sup> U.S. Nuclear Regulatory Commission, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (Sept. 2014).

<sup>&</sup>lt;sup>19</sup> *Id.* at 4-88.

### Holtec's "Contingency Allowance" Is Deficient

- 41. Holtec's so-called contingency allowance is woefully deficient in several respects and fails to provide adequate assurance of Holtec's financial qualifications. Initially, Holtec's cost estimate for the IPEC relies on an undisclosed "Monte-Carlo" analysis, which we are told resulted in a 18 percent contingency allowance for license termination, spent fuel management (except for ISFSI decommissioning, for which a 25% allows was selected), and site restoration costs. PSDAR at 93–95. Because the PSDAR does not contain the Monte-Carlo simulation risk modeling analysis on which Holtec claims to have relied, the NRC and the public have no way to evaluate that analysis. The PSDAR also states that the contingency analysis is built in large part on an analysis of "discrete risk events." PSDAR at 94–95. Yet the PSDAR nowhere identifies which discrete risk events were considered in its analysis. We are then told that, as a result of this undefined analysis, Holtec determined that an 18 percent contingency analysis was appropriate for the IPEC. *Id.* at 95. But the PSDAR contains no justification for that precise figure or how Holtec reached it, nor does the PSDAR explain how that 18 percent figure is applied to particular items in the cost estimate.
- 42. Moreover, even if Holtec's 18 percent figure is accurate, its contingency allowance does not actually account for unforeseen contingencies. Indeed, as the PSDAR makes clear, Holtec expects that the contingency allowance will be "fully consumed" during the decommissioning process. PSDAR at 95. Put differently, the contingency allowance accounts only for costs Holtec expects to incur. In short, the so-called contingency allowance is no contingency allowance at all.
- 43. The inclusion of a genuine contingency allowance to account for unforeseen costs demonstrates the problem. Had Holtec included a contingency allowance that actually accounts

for unknown and unexpected costs, the trust fund could quickly become depleted. For instance, the application of a 25% contingency allowance would result in a significant funding shortfall.

Chart 2 (Cost in Thousands)

	IP1	IP2	IP3	Total IPEC
Total Cost of Retirement	\$598,184	\$701,822	\$1,002,378	\$2,302,384
Projected Trust Funds Remaining	\$19,993	\$72,677	\$170,582	\$263,253
Total Cost of Retirement (25% Contingency)	\$747,730	\$877,277.5	\$1,252,972.5	\$2,877,980
Projected Trust Funds Remaining (25% Contingency)	-\$129,553	-\$102,778.5	-\$80,012.5	-\$312,344

44. Holtec's failure to include in its cost estimates a genuine contingency allowance violates the Commission's regulations in at least two ways. First, the PSDAR contains no discussion of how Holtec has accounted for "unforeseen conditions or expenses that arise" during decommissioning, if Holtec has done so at all. *See* 10 C.F.R. § 50.82(a)(8)(i)(B). Second and more fundamentally, by failing to account for unexpected costs, Holtec has not adequately demonstrated that it possesses the financial qualifications necessary to safely decommission the IPEC. *See* 42 U.S.C. § 2232(a); *see also* 10 C.F.R. § 50.80(c)(1).

# B. Absent Additional Assurances, Holtec's Corporate Structure and Lack of Assets or Revenue Streams Makes Holtec Financially Unfit to Decommission Indian Point

45. Holtec's corporate structure, lack of assets or revenue streams, and inexperience further demonstrates that Holtec lacks the necessary "technical and financial qualifications" to safely decommission the IPEC. 42 U.S.C. § 2232(a); see also 10 C.F.R. § 50.80(c)(1) (requiring

the Commission to determine that the "proposed transferee is qualified to be the holder of the license").

46. To ensure that these provisions do not become a dead letter, the Commission is required to closely scrutinize the financial security of a proposed license holder. As the Commission has explained:

The NRC has a statutory duty to protect the public health and safety and the The requirements for financial assurance were issued because inadequate or untimely consideration of decommissioning, specifically in the areas of planning and financial assurance, could result in significant adverse health, safety and environmental impacts. The requirements are based on extensive studies of the technology, safety, and costs of decommissioning (53 FR 24018). The NRC determined that there are significant radiation hazards associated with nondecommissioned nuclear reactors. The NRC also determined that the public health and safety can best be protected if its regulations require licensees to use methods which provide reasonable assurance that, at the time of termination of operations, adequate funds are available so that decommissioning can be carried out in a safe and timely manner and that lack of funds does not result in delays that may cause potential health and safety problems (53 FR 24018, 24033). The purpose of financial assurance is to provide a second line of defense, if the financial operations of the licensee are insufficient, by themselves, to ensure that sufficient funds are available to carry out decommissioning (63 FR 50465, 50473).<sup>20</sup>

47. As a result of a series of intricate corporate transfers proposed in the License Transfer Application, the IPEC will be transferred to an entity called Nuclear Asset Management Company, LLC ("NAMCo"), a wholly owned subsidiary of Holtec. NAMCo, in turn, will act as the direct parent company of Holtec IP2 and Holtec IP3. Holtec IP2 will hold the owner licenses for IP1 and IP2, and Holtec IP3 will hold the owner license for IP3. HDI, a separate entity and indirectly wholly owned subsidiary of Holtec, will assume the licensing responsibility for the IPEC units. In particular, HDI will act as the licensed operator responsible for decommissioning the IPEC. Holtec IP2 and Holtec IP3, which will hold each Indian Point unit's decommissioning

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<sup>&</sup>lt;sup>20</sup> NRC, Questions and Answers on Decommissioning Financial Assurance, Encl. 5, at 2 (ADAMS Accession No. ML11195031) (emphasis added).

trust funds as a result of the transfers, will pay HDI to cover the costs of post-shutdown operations, including decommissioning costs, spent fuel management costs, and site restoration costs.

- 48. This web of corporate ownership raises several red flags that, at a minimum, illustrate that an "inquiry in depth is appropriate." In re Gulf States, 40 N.R.C. at 51. First, all of the corporate entities that would be directly responsible for decommissioning the IPEC — HDI, Holtec IP2, and Holtec IP3 — are structured as limited liability companies. See LTA, Figure 2 (Simplified organization Chart (Post-Transfer)). This structure raises significant concerns. At the very least, placing the IPEC in the hands of limited liability companies means that if these entities at some point have liabilities that outstrip their assets — for instance, if cost overruns or flawed assumptions deplete the DTF — these entities could simply declare bankruptcy and walk away, having squandered the *only* resource set aside to decommission the IPEC. That prospect could result in significant public health and safety risks that Holtec has neither considered nor accounted for in the PSDAR. See, e.g., New York v. Nuclear Regulatory Comm'n, 681 F.3d 471, 474 (D.C. Cir. 2012) (noting spent nuclear fuel "poses a dangerous, long-term health and environmental risk" and "will remain dangerous for time spans seemingly beyond human comprehension" (internal quotation marks omitted)). As representatives of the local community that has housed the IPEC for decades, the burden of these unanalyzed environmental and public safety risks would fall squarely on Petitioners.
- 49. These layers of corporate ownership raise yet another concern. As consideration for the IPEC, Holtec will pay Entergy just \$1,000. *See* PSDAR, Attachment B, Membership Interest Purchase and Sale Agreement § 1.2. In exchange for this meager sum, Holtec, through its ownership of Holtec IP2 and Holtec IP3, takes ownership over the entire Decommissioning Trust Fund valued at \$2.1 billion. Entergy, in turn, would be entirely released from the

responsibility over decommissioning operations, spent fuel management, and site restoration at the IPEC. Given the awesome responsibility (and liability) that Holtec plans to take on, the deal makes sense for Holtec only if it can be compensated from the trust fund above and beyond the actual work completed at the Site. Indeed, this fact is reinforced by the layers of corporate ownership and responsibility Holtec proposes to create. Rather than creating single entity (or entities) to hold title to the trust funds and use those funds to remediate the Site, Holtec has created HDI, an entity with no assets or revenue, and tasked it with coordinating the decommissioning operation. Doing so allows HDI to mark up its services and take a cut of the trust fund. Were that not enough, Holtec has formed another LLC called Comprehensive Decommissioning International, LLC ("CDI"), a jointly held entity owned by HDI and a subsidiary of SNC-Lavalin Group, Kentz USA, Inc. Through a general contractor agreement, CDI would manage and perform day-to-day activities at the IPEC, allowing it to take yet another slice of the trust fund. Through another layer of corporate ownership, HDI, Holtec IP2, and Holtec IP3 would be owned by Holtec Power, Inc., which is finally owned by Holtec International, Holtec's parent company. Holtec also states that it plans to hire numerous subcontractors to actually complete the decommissioning activities at the IPEC, each of which will take a profit for completing this work. In short, each of these layers of ownership and operational authority creates an opportunity to siphon millions of dollars from the trust fund. Rather than creating assurances of available funds, Holtec's corporate structure presents only an assurance of depletion.

50. These concerns are heightened by the fact that Holtec is a closely held independent company, not a rate-regulated utility. This means that if Holtec has underestimated the costs of decommissioning the IPED — a highly likely eventuality, as explained above — Holtec cannot recover those costs from ratepayers. Nor is there any guarantee that Holtec IP2, Holtec IP3, or

HDI (the entities that would hold the owner and operator licenses respectively) could obtain funding for cost overruns from their parent company, Holtec International. As the NRC has long explained, "[a] parent company is not an NRC licensee," and as such, "[t]he NRC does not have the authority to require a parent company to pay for the decommissioning expenses of its subsidiary-licensee, except to the extent the parent may voluntarily provide" such assurances. NRC, Questions and Answers on Decommissioning Financial Assurance, Encl. 5, at 2 (ADAMS Accession No. ML11195031). Accordingly, absent the Commission placing a condition on approval of the License Transfer Application, "there is no assurance that the parent's assets will be used to pay for [HDI's] decommissioning costs" should the DTF come up short. *Id.* Even if the Commission did place conditions on approving the LTA, there is also no indication that Holtec's parent company has the funds to buttress HDI's financial qualifications.

- 51. Moreover, the License Transfer Application and PSDAR make clear that the DTF is the *only* source of funds available to decommission the IPEC. *See* LTA Cover Letter at 2 (asserting that the funds available in the DTF are sufficient to cover decommissioning costs and stating this "demonstrates the financial qualifications of Holtec IP2 and Holtec IP3"); LTA at 17–18 ("Thus, the existing decommissioning trust funds provide the appropriate basis for the financial qualifications of Holtec IP2 and Holtec IP3."). Holtec has not identified any independent assets or revenue streams at the disposal of HDI, Holtec IP2, or Holtec IP3 that would provide a backstop if the trust fund is depleted. Indeed, Holtec does not even attempt to contend that the proposed license holders are independently qualified to own the IPEC and safely decommission the Site. Instead, Holtec rests its financial qualification *exclusively* on the trust fund.
- 52. Holtec's inexperience, which is apparent from its filings in this proceeding, raises additional red flags that warrant consideration at a hearing. Holtec has never operated a nuclear

facility, must less decommissioned one. Indeed, HDI, the entity tasked with managing the decommissioning of the IPEC, did not even exist until 2018. Because these entities are closely held, there is virtually no financial information available to the public. Holtec acknowledges its lack of experience in the License Transfer Application, stating that CDI (the entity tasked with day-to-day decommissioning tasks) "plans to enter into subcontracts with nuclear industry vendors with decommissioning experience to complete various decommissioning activities." License Transfer Application at 4. Holtec also states that it plans to retain current IPEC staff to conduct decommissioning operations. *Id.* at 13. While laudable, this does not make up for Holtec's lack of experience, since the current IPEC staff, who have worked at an operating nuclear plant, presumably have no experience decommissioning a nuclear facility. Finally, Holtec claims that it will fill any knowledge gaps through its "ready access to technical and project resources" based on "its affiliation with both Holtec International and SNC-Lavalin, its large corporate parents." Id. at 16. But this too offers little comfort, given that neither of those entities has successfully decommissioned a nuclear plant, and neither entity has provided any financial assurances to back the project. In short, Holtec has not demonstrated the technical qualifications necessary to take ownership over the IPEC.

53. This inexperience also carries over into Holtec's overly optimistic cost projections. Because Holtec has never decommissioned a nuclear facility before, it cannot draw on experience to justify its cost estimates. Nor has Holtec committed to backing its projections with financial assurance mechanisms from its corporate parent companies. Despite this, Holtec would have the Commission release the only funds available to decommission and restore the IPEC with no strings attached. Doing so would place the decommissioning trust fund and the local communities in the type of jeopardy that the NRC is tasked with preventing.

74. All of these concerns boil down to one simple fact: if the DTF falls short for any reason, the entities responsible for decommissioning the IPEC have nothing to fall back on. HDI has no assets or capital of its own. It has no revenue stream beyond the DTF. And Holtec's corporate structure is designed specifically to avoid HDI's parent company from making good on HDI's promises. As a result, Holtec's corporate structure does not provide adequate financial assurance that the decommissioning of the IPEC can be completed in manner that protects public health, safety, and the environment, especially given the not unlikely cost overrun scenarios described herein. See 42 U.S.C. § 2232(a). Moreover, HDI has not met the NRC's regulatory requirement of submitting sufficient information to demonstrate that HDT "possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license." 10 C.F.R. §§ 50.33(f)(2); 50.82(a)(8)(vi). At a minimum, these concerns illustrate that an "inquiry in depth is appropriate" before approving the proposed transfers. In re Gulf States, 40 N.R.C. at 51.

# C. The License Transfer Application, Forthcoming Exemption Request, and PSDAR Incentivize Holtec to Cut Corners, Resulting in Significant Public Health, Safety, and Environmental Risks

55. As part of the License Transfer Application, Holtec, though its ownership of Holtec IP2 and Holtec IP3, will take ownership of the decommissioning trust funds. LTA at 2. In addition, Holtec states that it will soon request an unconditional exemption to spend a portion of the trust fund on non-decommissioning activities, including spent fuel management and site restoration. See LTA at 18; see also 10 C.F.R. § 50.82(a)(8)(i)(A) (stating that withdrawals from the decommissioning trust fund may be used only for "legitimate decommissioning activities consistent with the definition of decommissioning in § 50.2").

- 56. Holtec claims that removing the legal restriction on the use of the DTF is necessary to pay for spent fuel management and site restoration. Indeed, given that Holtec has no assets or revenue streams of its own, the only way to cover those expenses is to permit Holtec to spend freely from the trust fund. But gifting Holtec the trust funds and then eliminating the restriction on the use of those fund has a meaningful side-effect. If Holtec's is granted ownership of the DTF and the right to the whatever funds remain after the IPEC is retired, Holtec will have an incentive to cut every conceivable corner during the decommissioning, spent fuel management, and site restoration processes to give itself the largest payout possible when the IPEC is fully retired. Out of an abundance of caution, Petitioners do not allege that Holtec will do so, only that the prudent exercise of discretion suggests that such an arrangement is not in the public interest.
- 57. The DTF is designed to guarantee that adequate funds are available to safely decommission the IPEC, while ensuring that the public is not left holding the bag for this expensive, complex, and dangerous task. Indeed, NRC regulations require that the DTF may be used only for decommissioning-related expenses, 10 C.F.R. § 50.82(a)(8)(i)(A), and places strict limits on expenditures to safeguard the fund, 10 C.F.R. § 50.82(a)(8)(i)(B)–(C). The DTF was never intended to be used to enrich private corporations while creating incentives to undertake perilous, corner-cutting decommissioning operations. Too much rides on the safe and successful decommissioning of nuclear plants for the Commission to sanction a transfer that so distorts the incentives of a license holder. This distorted incentive structure is inconsistent with the public interest, and sanctioning it would violate NRC's duty to approve license transfers only if doing so would provide adequate assurances that the public health, safety, and the environment is secure. 42 U.S.C. § 2232(a).

- 58. To alleviate these concerns, the Commission should exercise its broad authority to impose conditions that ensure the financial qualifications of the proposed licensees and provide sufficient protections for public health and safety. *See, e.g.*, 42 U.S.C. §§ 2201(b) and 2234; 10 C.F.R. §§ 30.34, 40.41, 50.80, and 70.32.<sup>21</sup> In accordance with its broad authority under the Atomic Energy Act and its implementing regulations, the NRC should first realign Holtec's incentives by capping the profits that Holtec can extract from the DTF and requiring that Holtec return to the local community any funds remaining after retiring the IPEC. Such a condition should also include designating additional funds to restoring the IPEC and rapidly returning the Site to productive use, and by guaranteeing that Holtec will meet its ongoing tax obligations to the local community.
- 59. It is not uncommon for any remaining decommissioning trust funds to be returned to the public. In *Matter of Entergy Nuclear Vermont Yankee*, *LLC*, for instance, the Commission noted that under the terms of the Master Trust Agreement, "55%" of "any money . . . left over at the end of decommissioning . . . is to be returned to benefit the ratepayers of Vermont who paid into the fund." That provision, like all provisions in a trust agreement, was necessarily cleared by the Commission. 10 C.F.R. § 50.75(h)(1). Similarly here, the Indian Point trust fund should be returned to benefit the local community that has supported Indian Point for decades.
- 60. The Commission should also condition approval of the License Transfer Application to ensure the financial qualifications of the licensees by giving Holtec's parent companies skin in the game. *See* 42 U.S.C. § 2232(a). Specifically, the Commission should

<sup>&</sup>lt;sup>21</sup> See also In re Wrangler Labs., Larsen Labs., Orion Chem. Co., & John P. Larsen, 33 N.R.C. 505 (June 25, 1991) (describing the Commission's authority to impose conditions).

<sup>&</sup>lt;sup>22</sup> In re Entergy Nuclear Vermont Yankee, LLC, And Entergy Nuclear Operations, Inc., No. 15-940-03-LA-BD01, 2015 WL 5883370, at \*2.

require Holtec to commit to robust financial assurance mechanisms that ensure that sufficient capital exists to complete the decommissioning of Indian Point should the DTF become depleted due to the reasonably foreseeable cost overruns described herein. Such financial assurances could include, at a minimum: parental guarantees, letters of credit, performance bonds, escrow accounts, or insurance products that address unforeseen expenses associated with decommissioning, spent fuel management, and site restoration. These commonsense financial conditions will ensure that the decommissioning process can be safely completed in the (not unlikely) event that decommissioning, spent fuel management, and site restoration costs exceed Holtec's estimates.

- 61. The Commission routinely imposes tailored conditions on the approval of license transfer applications to ensure the financial viability of a proposed licensee. For example, when the Boston Edison Company sought to transfer the Pilgrim Nuclear Power Station to Entergy Nuclear Generation Company, the Commission required Entergy to create a \$50 million contingency fund to cover any unforeseen expenses that might arise during decommissioning.<sup>23</sup> The Commission should take the same approach here. Given that HDI, Holtec IP2, and Holtec IP3 are limited liability companies with no independent assets or revenue streams, the NRC should, at the very least, require a parent company guarantee to make up any short fall and ensure that the licensees have the financial qualifications to safely and effectively decommission the IPEC.<sup>24</sup>
- 62. "[A]ssuring adequate funds for a reactor owner to meet its decommissioning obligations is part of the bedrock on which NRC has built its judgment of reasonable assurance of

<sup>23</sup> See, e.g., Order Approving Transfer of Licenses and Conforming Amendments, 64 Fed. Reg. 24,426, 24,427 (May 6, 1999) (requiring, as a condition of approving transfer of licenses, creation of \$50 million contingency fund).

<sup>&</sup>lt;sup>24</sup> See 10 C.F.R. Part 30 App'x A ("An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on obtaining a parent company guarantee that funds will be available for decommissioning costs and on a demonstration that the parent company passes a financial test.").

adequate protection for the public health and safety and protection of the environment."<sup>25</sup> Indeed, the Commission has long understood that inadequate funding to carry out decommissioning operations can cause significant public health and safety problems, issues that are squarely within the Commission's jurisdiction.<sup>26</sup> To date, Holtec has not introduced sufficient evidence to demonstrate that it has the financial qualifications to decommission the IPEC in a manner that protects the health and safety of the public. At the very least, Petitioners have demonstrated that Holtec's financial qualifications are in doubt. Accordingly, the Commission must grant Petitioners' request to intervene and promptly schedule a hearing to address these issues.

#### **CONTENTION II**

# The Applications Do Not Include the Environmental Review Required by the National Environmental Policy Act ("NEPA") and NRC Regulations

MEPA and its implementing regulations require that the Commission conduct, at a minimum, an environmental assessment of the potential direct and indirect consequences of approving the License Transfer Application, Forthcoming Exemption Request, and PSDAR. This is so for at least two reasons. First, special circumstances exist that render the categorical exclusion for direct or indirect license transfers inapplicable. 10 C.F.R. § 51.22(c)(21). Second, the environmental issues posed by the decommissioning operation are not bounded by the Generic Environmental Impact Statement and the Indian Point Site-Specific Supplemental Environmental Impact Statement, and so these issues require further consideration by the Commission. Because the Commission is required to comply with NEPA before taking any major federal action, these

<sup>&</sup>lt;sup>25</sup> In re Entergy Nuclear Vermont Yankee, LLC, And Entergy Nuclear Operations, Inc., No. 15-940-03-LA-BD01, 2015 WL 5883370, at \*10.

<sup>&</sup>lt;sup>26</sup> See General Requirements for Decommissioning Nuclear Facilities, 53 Fed. Reg. 24,018, 24,037 (June 27, 1988).

issues are within the scope of the proceeding and material to the findings the NRC must make to support the action that is involved in the proceeding.

### A. Regulatory Framework

- 64. NEPA is "our basic national charter for the environment." 40 C.F.R. § 1500.1(a). Its purpose is "[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; [and] to enrich the understanding of the ecological systems and natural resources important to the Nation." 42 U.S.C. § 4321.
- on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 C.F.R. § 1500.1(c). It does so by requiring "agencies contemplating 'major [f]ederal actions significantly affecting the quality of the human environment' to prepare an Environmental Impact Statement ('EIS') demonstrating agency consideration of the reasonably foreseeable environmental effects." *Brodsky v. U.S. Nuclear Regulatory Comm'n*, 704 F.3d 113, 119 (2d Cir. 2013) (quoting 42 U.S.C. § 4332(2)(C)). "The purpose of an EIS is to 'provide full and fair discussion of significant environmental impacts and [to] inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." *Nat. Res. Def. Council, Inc. v. F.A.A.*, 564 F.3d 549, 556 (2d Cir. 2009) (quoting 40 C.F.R. § 1502.1.). Thus, NEPA's mission is "to generate federal attention to environmental concerns and to reveal that federal consideration for public scrutiny." *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 147 (D.C. Cir. 1985). To fulfill its obligations under NEPA, an agency must "take a 'hard look' at the environmental consequences before taking

a major federal action." *Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410, n. 21 (1976)).

- NEPA applies equally to affirmative agency actions, such as licensing decisions, and to actions undertaken by a private party that "are potentially subject to Federal control and responsibility." 40 CFR § 1508.18; *Dep't of Trans. v. Public Citizen*, 541 U.S. 752, 763–64 (2004) ("Under applicable CEQ regulations, [m]ajor Federal action" is defined to "includ[e] actions with effects that may be major and which are potentially subject to Federal control and responsibility." (internal quotation marks omitted)). Particularly relevant here, "[a]ctions include the circumstance where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the Administrative Procedure Act or other applicable law as agency action." 40 C.F.R. § 1508.18.
- 67. "As a preliminary step, an agency may prepare an [Environmental Assessment ("EA")] in order to determine whether the environmental impact of a proposed action is significant enough to warrant preparation of an EIS." *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998); *see also Sierra Club v. Marsh*, 769 F.2d 868, 870 (1st Cir. 1985) ("The CEQ regulations permit federal agencies to make a preliminary 'Environmental Assessment'... aimed at determining whether the environmental effects of a proposed action are 'significant.""). An EA is "a concise public document" designed to "[b]riefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement." 40 C.F.R. § 1508.9. To meet these standards, "[a]n EA must provide the public with sufficient environmental information, considered in the totality of the circumstances, to permit members of the public to weigh in with their views and thus inform the agency decision-making process." *Tri-Valley CAREs v. U.S. Dep't of Energy*, 671 F.3d 1113, 1128 (9th Cir. 2012).

- 68. "If, pursuant to the EA, an agency determines that an EIS is not required under applicable CEQ regulations, it must issue a 'finding of no significant impact' (FONSI), which briefly presents the reasons why the proposed agency action will not have a significant impact on the human environment." *Pub. Citizen*, 541 U.S. at 757–58; *see also* 40 C.F.R. §§ 1501.4(e); 1508.13. And if an agency determines that an EIS is not necessary, "it must supply a convincing statement of reasons to explain why a project's impacts are insignificant." *Blue Mountains*, 161 F.3d at 1212.
- on the environment, then the agency must prepare an [EIS]." *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1185 (9th Cir. 2008). Under CEQ's implementing regulations, an EIS is required if an action has "effects that *may* be major and which hare *potentially* subject to Federal control and responsibility." 40 C.F.R. § 1508.18. Indeed, "[w]hen the determination that a significant impact will or will not result from the proposed action is a close call, an EIS should be prepared." *Friends of Back Bay v. U.S. Army Corps of Engineers*, 681 F.3d 581, 590 (4th Cir. 2012) (quoting *Nat'l Audubon Soc. v. Hoffman*, 132 F.3d 7, 13 (2d Cir. 1997)).
- 70. Particularly relevant here, CEQ regulations permit an agency to categorically exclude "certain classes of actions from the EIS requirement on the ground that such actions do not individually or cumulatively have a significant effect on the environment." *Brodsky*, 704 F.3d at 120; 40 C.F.R. §§ 1507.3(b)(2), 1508.4; *see also* 10 C.F.R. § 51.22(c) (establishing categorical exclusions for various NRC actions). In the "narrow instance[]" in which a categorical exclusion applies, neither an EA nor an EIS is required. *Coal. of Concerned Citizens to Make Art Smart v. Fed. Transit Admin. of U.S. Dep't of Transportation*, 843 F.3d 886, 902 (10th Cir. 2016) (internal quotation marks omitted); *see also* 40 C.F.R. § 1508.4.

### B. The Commission Has Not Completed the Environmental Review Required by NEPA

- 71. Approval of the License Transfer Application, Forthcoming Exemption Request, and PSDAR at this stage would violate NEPA in at least two ways. First, approval of the License Transfer Application, considered in conjunction with the Forthcoming Exemption Request and PSDAR, does not fall within the categorical exclusion described in 10 C.F.R. § 51.22(c)(21) because extraordinary circumstances preclude its application. Second, the environmental consequences considered in the PSDAR are not bounded by prior environmental review conducted by the Commission, and so a supplemental environmental impact review is necessary before the Applications may be granted.
- 72. The Applicants claim that the License Transfer Application "is exempt from environmental review, because it falls within the categorical exclusion contained in 10 C.F.R. § 51.22(c)(21)." LTA at 21. The applicants are wrong, and adopting their approach would unlawfully restrict the Commission's review of the Applications as a whole.

### The Forthcoming Exemption Request and PSDAR Pose Significant, Unanalyzed Environmental Risks

73. The Commission cannot approve the Applications at this stage for at least two reasons. First, the Commission is required by law to consider the environmental consequences of the Applications as a whole, including the Forthcoming Exemption Request. Yet neither Holtec nor the Commission has conducted *any analysis* of the environmental impacts of granting an exemption from the restriction of the use of decommissioning trust funds, nor has Holtec or the Commission analyzed the foreseeable environmental consequences of a shortfall in the trust fund. Second, the scope of the Applications goes well beyond the ordinary license transfer request contemplated by the Commission when it adopted the categorical exclusion found in 10 C.F.R. § 51.22(c)(21). The proposed transfer, coupled with Forthcoming Exemption Request and the

potential for significant cost overruns, qualifies as a special circumstance barring application of a categorical exclusion in this case.

- 74. The Commission is required by law to conduct a comprehensive analysis of the Applications avoid unlawfully segmenting its analysis. See, e.g., Delaware Riverkeeper Network v. F.E.R.C., 753 F.3d 1304, 1314 (D.C. Cir. 2014) ("The justification for the rule against segmentation is obvious: it prevents agencies from dividing one project into multiple individual actions each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." (internal quotation marks and alterations omitted)); Town of Huntington v. Marsh, 859 F.2d 1134, 1142 (2d Cir. 1988) (noting courts have "uniformly rejected" segmentation, which involves dividing a project "into component parts, each involving action with less significant environmental effects"); cf. 40 C.F.R. § 1508.25(a) (requiring joint consideration of connected and cumulative actions). Separate environmental reviews of the License Transfer Application, Forthcoming Exemption Request, and PSDAR would violate this rule.
- 75. Holtec acknowledges that the purpose of the license transfer is to conduct "decommissioning, spent fuel management, and site restoration" at Indian Point. LTA at 2–3. Indeed, Holtec states repeatedly that the Forthcoming Exemption Request is essential to the larger license transfer, noting that "because HDI's funding plan for spent fuel management and site restoration activities *relies on the use of [the DTF]*, HDI plans to request an exemption to allow HDI to use a portion of the NDT funds for these activities." *See* Application Cover Letter at 4 (emphasis added). Because the Forthcoming Exemption Request and PSDAR are integrally related components of the larger license transfer proposed herein, the Commission must review all three aspects of the transaction together.

76. As explained in greater detail above, approving the Applications could result in a significant shortfall in the DTF, causing drastic environmental consequences. Holtec concedes that HDI, which has no apparent assets or revenue streams, would be *completely reliant* on the DTF to defray the costs of decommissioning, spent fuel management, and site restoration. Yet for the reasons explained above, Holtec's own PSDAR and generally accepted facts demonstrate that the DTF may prove insufficient to cover those costs. For example, Holtec's assumption that the DOE will begin accepting spent nuclear fuel by 2030 does not stand up to scrutiny, and those costs alone could bankrupt the DTF. Without a committed source of funds to pay for the potentially indefinite cost of on-site spent fuel management, a contingency the NRC has already deemed "very possible," 27 granting the Applications could result in significant radiological incidents and cause untold environmental consequences.

77. Holtec has also failed to account for significant cost overrun scenarios that could easily bankrupt the DTF and cause dire environmental consequences. For instance, Holtec has not conducted any on-site environmental testing to determine the scope of the radiological and non-radiological contamination at the Site. As such, Holtec's cost estimates are necessarily speculative, and Holtec has not accounted for these cost-overrun contingencies in its Decommissioning Cost Estimate. Granting the exemption request would permit Holtec to divert approximately \$765 million from the DTF, potentially leaving it with little to no money to address radiological and non-radiological contamination on site. Holtec has not accounted for these environmental consequences, which flow directly from approving the License Transfer Application.

<sup>&</sup>lt;sup>27</sup> See Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. at 56,245; see also In re Entergy Nuclear Vermont Yankee, LLC, And Entergy Nuclear Operations, Inc., No. 15-940-03-LA-BD01, 2015 WL 5883370, at \*12 ("[I]ndefinite storage of spent fuel on-site is a very possible outcome").

78. To date, the Applicants have submitted no analysis of the reasonably foreseeable environmental consequences of granting the Forthcoming Exemption Request. Yet Holtec would have the Commission approve the License Transfer Application, despite the fact that no environmental analysis has been conducted on those consequences, much less an analysis that complies with NEPA. The Commission simply cannot, consistent with NEPA, approve the License Transfer Application without considering the environmental consequences of an indispensable part of the larger transaction of which the LTA is a part. To do so would shred the Commission's core obligation under NEPA to consider environmental consequences before taking the proposed action. *Baltimore Gas & Elec. Co.*, 462 U.S. at 97.

79. For the same reasons, the expanded scope of the proposed license transfer constitutes a "special circumstance[]" that renders inapplicable the categorical exclusion for ordinary license transfers. 10 C.F.R. § 51.22(b). The Commission opted not to define the term "special circumstances" "to preserve . . . necessary flexibility" to apply the test in the myriad of circumstances in which it might arise. Applying this flexible test here, the license transfer at issue goes well beyond the non-substantive "direct or indirect transfer[] of any license issued by the NRC." *Id.* § 51.22(c)(21). Indeed, in adopting the categorical exclusion, the Commission stressed that it would not cover more substantive aspect of a license transfer. The Commission stated that it "wishe[d] to emphasize that the proposed rules address only license transfers and associated administrative amendments that reflect transfers" and would not cover "changes in actual operations or requirements directly involving health and safety-related activities." *See* Streamlined Hearing Process for NRC Approval of License Transfers, 63 Fed. Reg. 66,721, 66,728

<sup>&</sup>lt;sup>28</sup> In re Pa'ina Hawaii, LLC, 63 N.R.C. 99, 110 (Jan. 24, 2016) (quoting 49 Fed. Reg. 9,352, 8,377 (Mar. 12, 1984)).

(Dec. 3, 1998). Here, the License Transfer Application necessarily includes other components — the Forthcoming Exemption Request and PSDAR — that invite significant and unanalyzed environmental risk. These environmental consequences will be felt most acutely by Petitioners and the communities they represent.

80. Consideration of environmental consequences as at the heart of the Commission's duty to protect public health and safety. As the D.C. Circuit long ago explained:

NEPA establishes environmental protection as an integral part of the Atomic Energy Commission's basic mandate. The primary responsibility for fulfilling that mandate lies with the Commission. Its responsibility is not simply to sit back, like an umpire, and resolve adversary contentions at the hearing stage. Rather, it must itself take the initiative of considering environmental values at every distinctive and comprehensive stage of the process beyond the staff's evaluation and recommendation.

Calvert Cliffs' Coordinating Comm., Inc. v. U. S. Atomic Energy Comm'n, 449 F.2d 1109, 1119 (D.C. Cir. 1971). Applying the categorical exclusion for ordinary license transfers in this case, without consideration of the significant environmental consequences that could arise from granting the Forthcoming Exemption Request and approving the PSDAR, would violate this foundational responsibility. Petitioners are entitled to a hearing to address this issue.

# The Potential Threats Identified in the PSDAR Are Not Bounded by Prior Environmental Impact Review

81. 10 C.F.R. § 50.82(a)(4)(i) requires Holtec to include in its PSDAR "a discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements." Holtec asserts that the environmental impacts posed by its decommissioning plan are so bounded. PSDAR at 39. The Commission is required to closely scrutinize this assertion, for as the Ninth Circuit has explained, where an agency has a "mandatory

obligation to review" a submission, "failure to disapprove" of that submission constitutes "major federal action under 40 C.F.R. § 1508.18." *Ramsey v. Kantor*, 96 F.3d 434, 445 (9th Cir. 1996).

- 82. An agency's obligations under NEPA do not end once an EIS is complete. "[B]y focusing Government and public attention on the environmental effects of proposed agency action[,]... NEPA ensures that the agency will not act on incomplete information, only to regret its decision after its s too late to correct." Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989). Permitting an agency to rely on outdated and incomplete information would undermine this central tenant of NEPA. As the Supreme Court has explained, "[i]t would be incongruous with this approach to environmental protection, and with the Act's manifest concern with preventing uninformed action, for the blinders to adverse environmental effects, once unequivocally removed, to be restored prior to the completion of agency action simply because the relevant proposal has received initial approval." Id. Rather, NEPA requires "agencies to file environmental impact statements when the remaining governmental action would be environmentally significant." Id. at 372 (internal quotation marks omitted); see also Pogliani v. U.S. Army Corps of Eng'rs, 306 F.3d 1235, 1237–38 (2d Cir. 2002) (explaining that Congress enacted NEPA "to ensure that federal agencies examine and disclose the potential environmental impacts of projects before allowing them to proceed").
- 83. Holtec's PSDAR fails to comply with 10 C.F.R. § 50.82(a)(4)(i) because it does not address the reasonably foreseeable potential impacts of climate change on spent fuel management, including storage in spent fuel pools and dry cask storage. In its consideration of offsite-related accidents, the 2002 GEIS on Decommissioning of Nuclear Facilities considered only seismic events, aircraft crashes, tornados with high winds, the impact of a dropped heavy load, such as a fuel cask, resulting in pool drainage or compression or buckling of storage

assemblies.<sup>29</sup> Since 2002, New York has experienced an increase in the frequency and intensity of extreme weather events as a result of climate change, typified by Superstorm Sandy. Although the 2018 GEIS Supplement 38 for Indian Point Nuclear Generating Unit Nos. 2 and 3 considered the effects of extreme weather events on the relicensing of IP2 and IP3, that document did not consider how storm surges and other environmental impacts affect decommissioning, spent fuel management, and site restoration at the IPEC.<sup>30</sup> Thus, Holtec has not shown that the "environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements." 10 C.F.R. § 50.82(a)(4)(i).

84. For the reasons explained in detail above, the PSDAR also fails to comply with 10 C.F.R. § 50.82(a)(4)(i) because it fails to consider the environmental consequences of cost overruns that deplete the DTF before the IPEC Site is radiologically decontaminated and restored for alternative use. A shortfall in the DTF could result in significant radiological and non-radiological environmental harms, including the inability to adequately maintain spent fuel storage and to safely remediate non-radiological contamination. These and other consequences of a funding shortfall would have significant public health, safety, and environmental consequences that have not been analyzed by the Commission. Nor has the Commission considered reasonable alternatives, such as financial assurance mechanisms to ensure that sufficient funds exist to safely decommission the IPEC. At a minimum, NEPA requires that the NRC undertake an environmental analysis of these risks. See 40 C.F.R. § 1501.4; id. § 1508.14.

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<sup>&</sup>lt;sup>29</sup> U.S. Nuclear Regulatory Commission, Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, Supplement 1 at 4-40 (Nov. 2002).

<sup>&</sup>lt;sup>30</sup> U.S. Nuclear Regulatory Commission, Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 38 Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Volume 5 at 5-72 to 5-73 (Apr. 2018).

#### CONCLUSION

Petitioners, as representatives of the local communities that will be most affected by the decommissioning of the IPEC, seek to intervene in this proceeding and request a hearing to address the following contentions. First, the License Transfer Application, Forthcoming Exemption Request, and PSDAR do not demonstrate that Holtec possesses the necessary technical and financial qualifications to ensure "adequate protection to the health and safety of the public," as required by the Atomic Energy Act, 42 U.S.C. § 2232(a), and its implementing regulations, including 10 C.F.R. §§ 50.33(f)(2), 50.75(h)(1)(iv), 50.82(a)(4)(i), and 50.82(a)(8)(i)(B) and (C). Specifically, the Holtec's untenable assumptions, corporation structure, and distorted incentives could result in significant cost overruns and the depletion and the Decommissioning Trust Fund. Second, the Commission cannot approve the Applications without conducting, at a minimum, an environmental assessment of the potential direct and indirect consequences of approving the License Transfer Application, Forthcoming Exemption Request, and PSDAR. The Applications pose several significant, unanalyzed environmental risks, including the risk of a funding shortfall in the DTF, that preclude application of the categorical exclusion for license transfer applications found in 10 C.F.R. § 51.22(c)(21). Additionally, Holtec has not adequately demonstrated that the potential threats identified in the PSDAR are bounded by prior environmental review as required by 10 C.F.R. § 50.82(a)(4)(i).

These issues are within the scope of the proceeding and material to the findings the NRC must make to approve the Applications. Accordingly, both contentions are admissible under 10 C.F.R. § 2.309(f). At the very least, Petitioners have sufficiently demonstrated that these contentions warrant further inquiry in depth. The Commission is required by law by grant the Petitioners' request to intervene and for a hearing to address the contentions raised herein.

Respectfully submitted,

Daniel Riesel

Signed (electronically) by

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<sup>&</sup>lt;sup>31</sup> Pursuant to 10 C.F.R. § 2.304(e), Petitioners designate Dane Warren to receive service in this proceeding.

# UNITED STATES OF AMERICA NUCLEAR ENERGY REGULATORY COMMISSION

#### **BEFORE THE SECRETARY**

:

In the Matter of

Docket Nos.

ENTERGY NUCLEAR OPERATIONS, INC.; : 50–003 ENTERGY NUCLEAR INDIAN POINT 2, LLC; : 50–247 ENTERGY NUCLEAR INDIAN POINT 3, LLC; : 50–286 HOLTEC INTERNATIONAL; AND HOLTEC : 72–051

DECOMMISSIONING INTERNATIONAL, LLC; :

CONSIDERATION OF APPROVAL OF

TRANSFER AND CONTROL OF LICENSES
AND CONFORMING AMENDMENTS

:

(Indian Point Nuclear Generating Station)

#### **CERTIFICATION OF SERVICE**

Pursuant to 10 C.F.R. § 2.305, I certify that copies of the Petition for Leave to Intervene and for a Hearing in the above-captioned proceeding were served via the NRC's Electronic Information Exchange on this 12th day of February, 2020.

Signed (electronically) by

Daniel Riesel SIVE PAGET & RIESEL P.C. Attorneys for Petitioners 560 Lexington Avenue, 15<sup>th</sup> Floor New York, NY 10022 driesel@sprlaw.com (212) 421-2150