



March 25, 2022

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Oyster Creek Nuclear Generating Station Renewed
Facility Operating License No. DPR-16
NRC Docket No. 50-219 and 72-15

Pilgrim Nuclear Power Station Renewed
Facility License No. DPR-35
NRC Docket Nos. 50-293 and 72-1044

Indian Point Nuclear Generating Stations 1, 2, & 3
Provisional Operating License No. DPR-5
Renewed Facility Operating License Nos. DPR-26 and DPR-64
NRC Docket Nos. 50-3, 50-247, 50-286 and 72-051

SUBJECT: Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations – Holtec Decommissioning International, LLC (HDI)

- REFERENCE:**
1. Letter, Holtec Decommissioning International, LLC to US NRC, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Oyster Creek Nuclear Generating Station," September 28, 2018 (Accession No. ML18275A116)
 2. Letter, Holtec Decommissioning International, LLC to US NRC, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Pilgrim Nuclear Power Station," November 16, 2018 (Accession No. ML18320A040)
 3. Letter, Holtec Decommissioning International, LLC to US NRC, "Post Shutdown Decommissioning Activities Report including Site-Specific Decommissioning Cost Estimate for Indian Point Nuclear Generating Units 1, 2, and 3," December 19, 2019 (Accession No. ML19354A698)
 4. Letter, Holtec Decommissioning International, LLC to US NRC, "Holtec Decommissioning International Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations," March 31, 2021 (Accession No. ML21090A336)
 5. Letter, Entergy to US NRC, "Decommissioning Funding Status Report per 10 CFR 50.75(f)(1) and 10 CRF 50.82(a)(8)(v) – Entergy Nuclear Operations, Inc.," March 25, 2021 (Accession No. ML21084A811)



In accordance with 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v), 10 CFR 50.82(a)(8)(vi), and 10 CFR 50.82(a)(8)(vii), Holtec Decommissioning International, LLC (HDI) is submitting the annual report on the status of decommissioning funding, the financial assurance report, and the status of funding for managing irradiated fuel as of December 31, 2021 for Oyster Creek Nuclear Generating Station (Oyster Creek), Pilgrim Nuclear Power Station (Pilgrim) and Indian Point Nuclear Generating Station Units 1, 2 and 3 (IPEC). The annual decommissioning funding assurance reports for Oyster Creek, Pilgrim, and IPEC are provided in Enclosures 1, 2, and 3 to this letter. Enclosure 4 to this letter provides the methodology used to calculate the formula cost amount per 10 CFR 50.75(c). Enclosure 5 to this letter provides the decommissioning milestone summary.

The initial HDI Site-Specific Decommissioning Cost Estimates for Oyster Creek and Pilgrim included in the revised Post-Shutdown Decommissioning Activities Reports (PSDAR) (References 1, 2) were based on the "DECON" method for decommissioning and were submitted in 2018. Subsequent to these initial decommissioning cost estimates, HDI prepared and submitted the annual report providing the decommissioning funding, irradiated fuel management funding, and financial assurance status through December 31, 2020, for Oyster Creek and Pilgrim (Reference 4). HDI prepared and submitted the initial Site-Specific Decommissioning Cost Estimates for IPEC included in the PSDAR (Reference 3) which was based on the "DECON" method for decommissioning and was submitted in 2019. Entergy submitted the IPEC Decommissioning Funding Status report for financial assurance through December 31, 2020 (Reference 5).

Enclosure 1, Enclosure 2, and Enclosure 3 to this letter provide the Annual Decommissioning Funding, Financial Assurance Report, and Irradiated Fuel Management Status for Oyster Creek, Pilgrim, and IPEC, respectively. The estimates provided in Enclosures 1, 2, and 3, using the December 31, 2021, trust fund balances, indicate Oyster Creek, Pilgrim, and IPEC sites have met the NRC's funding requirements. Accordingly, HDI concludes that no further action is required at this time to demonstrate adequate funding assurance for decommissioning the Oyster Creek, Pilgrim and IPEC sites.

There are no regulatory commitments contained within this letter.

If you should require any further information, please contact me at (856) 797-0900 x 3578

Sincerely,

Jean Fleming
Vice President, Regulatory and Environmental Affairs
Holtec Decommissioning International, LLC



Enclosures:

- (1) Oyster Creek Nuclear Generating Station Annual Decommissioning Funding and Spent Fuel Management Status and Financial Assurance Report
- (2) Pilgrim Nuclear Power Station Annual Decommissioning Funding and Spent Fuel Management Status and Financial Assurance Report
- (3) Indian Point Nuclear Generating Station Units 1, 2, and 3 Annual Decommissioning Funding and Spent Fuel Management Status and Financial Assurance Report
- (4) Methodology Used to Calculate the Formula Cost Amount per 10 CFR 50.75(c)
- (5) Annual Decommissioning Funding and Spent Fuel Management Status and Financial Assurance Report Milestone Summary

cc:

USNRC Regional Administrator, Region I
USNRC Senior Project Manager, NMSS - Oyster Creek
USNRC Senior Project Manager, NMSS – Pilgrim Nuclear Power Station
USNRC Senior Project Manager, NMSS – Indian Point Units 1, 2 & 3
NRC Region 1 Lead Inspector, Indian Point Units 1, 2 & 3
NRC Region 1 Lead Inspector – Oyster Creek
NRC Region 1 Lead Inspector – Pilgrim Nuclear Power Station
New York State Department of Public Service
New York State Liaison Officer Designee, NYSERDA
New Jersey DEP - Assistant Commissioner, Air Quality, Energy and Sustainability
New Jersey Bureau of Nuclear Engineering, Assistant Director Radiation Protection Element,
Commonwealth of Massachusetts, Executive Office of Environmental Affairs
Commonwealth of Massachusetts, Department of Public Health
Commonwealth of Massachusetts, Department of Environmental Protection
Commonwealth of Massachusetts, Director, Massachusetts Emergency Management Agency

Enclosure 1

Holtec Decommissioning International

**Oyster Creek Nuclear Generating Station
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
As of December 31, 2021**

Holtec Decommissioning International
Oyster Creek Nuclear Generating Station
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
As of December 31, 2021

As required by 10 CFR 50.75(f), 50.82(a)(7), and 50.82(a)(8), Holtec Decommissioning International (HDI) reports the following information for Oyster Creek Nuclear Generating Station:

A. Formula Cost Amount per 10 CFR 50.75(c)

Pursuant to 10 CFR 50.75(c), the 2022 estimated NRC formula cost is \$648,014,501. HDI does not use this calculation for any decommissioning cost estimates or evaluations.

B. Current Decommissioning Cost Estimate

The required minimum funding assurance amount for Oyster Creek as of December 31, 2021, is based on the site-specific Decommissioning Cost Estimate (DCE) developed in accordance with 10 CFR 50.82(a) and included in the HDI revised Post-Shutdown Decommissioning Activities Report (PSDAR) (Reference 1) and updated in the 2020 Annual Decommissioning and Spent Fuel Management Report (Reference 2). Additional reporting requirements are documented on Table 1 of this Enclosure. Table 1 provides HDI's revised total estimate information as required by 10 CFR 50.82. The revised total estimate to complete decommissioning for the Oyster Creek site is \$444M (in 2021 dollars) as shown in cash flow analysis in Table 2. Of that total cost estimate, the revised estimate for license termination expenses is \$224M, the current separate estimate of spent fuel management costs is \$187M and the current separate estimate for site restoration costs is \$32M.

C. Current Decommissioning Fund Balance

The Oyster Creek Nuclear Decommissioning Trust (NDT) fund balance as of December 31, 2021, was \$593M. This amount represents the market value of the NDT fund as of December 31, 2021, net of any material current income tax liability on realized gains, interest, dividends, and other income of the trust. No additional amounts remain to be collected. The trust fund amount is the total available for decommissioning including costs of license termination decommissioning, spent fuel management, and site restoration activities. The total is provided because HDI received an exemption from 10 CFR 50.82(a)(8)(i)(A) to allow the Oyster Creek Trust Fund to be used for site irradiated fuel management and site restoration costs (Reference 3).

D. Assumptions Used Regarding Rates of Escalation for Decommissioning Costs, Earnings on Funds, and Other Factors Used in Funding Projections

HDI has assumed a 2% real rate of return as allowed by 10 CFR 50.75(e)(1)(i).

E. Rates used to Inflate Decommissioning Costs

The estimates in the 2018 HDI Oyster Creek Revised PSDAR/DCE (Reference 1) were provided in 2018 dollars. The estimates provided in Table 1 of this Enclosure have been inflated to 2021 dollars. The Bureau of Labor Statistics (BLS) data provided the basis for the decommissioning cost estimate inflation rate forecast. Decommissioning costs are inflated using a weighted average of BLS indices for Labor, Energy, Consumer Price Index, Materials, and Equipment. For Burial inflation factor, HDI utilized NUREG-1307, Revision 18. HDI has used a factor of 1.02 to calculate the inflation to 2021 dollars. This is conservative as it does not credit the fixed price contracts.

F. Current ISFSI Decommissioning Cost

The current site-specific Independent Spent Fuel Storage Installation (ISFSI) decommissioning cost estimate is \$4.093M (2021 dollars). The ISFSI estimated costs are based on the estimated costs provided in the HDI Revised PSDAR/DCE (Reference 1), and amended in Reference 2, which were inflated using published inflation indices as previously discussed in item (E).

G. Decommissioning Financial Assurance

Financial assurance for decommissioning is provided by the prepayment method, coupled with an external trust fund, in accordance with 10 CFR 50.75(e)(1)(i) and 10 CFR 72.30(e)(1) as approved by the NRC in their approval of the license transfer to Oyster Creek Environmental Protection (OCEP) and HDI.

H. Changes in the Decommissioning Funding Plan Trust Agreement

No change.

Refer to Tables 1 and 2 of this Enclosure for additional required reporting data. Table 2 provides a cashflow analysis using the revised decommissioning cost estimates developed by HDI. This cash flow analysis demonstrates that the Oyster Creek decommissioning trust fund is sufficiently funded to cover costs as estimated for the license termination, spent fuel management and site restoration activities necessary to complete safe and compliant decommissioning of the site.

In accordance with 10 CFR 50.82(a)(7), HDI is notifying the NRC of a schedule change from that described in the Oyster Creek Revised PSDAR (Reference 1). HDI has updated its schedule to reflect the current decommissioning plan. The schedule revisions reflect actual work progress achieved since HDI's acquisition of the site and includes revisions to the work plan resulting from more detailed project planning and optimization since HDI's submittal of the Oyster Creek Revised PSDAR (Reference 1). The PSDAR (Reference 1) indicates that the Reactor Pressure Vessel (RPV) will be segmented and packaged for disposal directly following the completion of RVI segmentation. HDI will further evaluate optimization of RPV segmentation and commence segmentation activities associated with the RPV in 2024. Enclosure 5 provides the major decommissioning project milestones and their updated scheduled completion dates.

The estimate to complete and cash flow analyses provided in Tables 1 and 2 confirm that the schedule revisions in Enclosure 5 are not financially significant as defined in 10 CFR 50.82(a)(7). HDI also has confirmed that the changes to the schedule remain bounded by the environmental evaluation included in the HDI Oyster Creek PSDAR (Reference 1).

References:

1. Letter, Holtec Decommissioning International, LLC to US NRC, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Oyster Creek Nuclear Generating Station," September 28, 2018 (Accession No. ML18275A116)
2. Letter, Holtec Decommissioning International, LLC to US NRC, "Holtec Decommissioning International Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations," March 31, 2021 (Accession No. ML21090A336)
3. Letter from US NRC to Exelon Generation Company, LLC, "Oyster Creek Nuclear Power Station— Issuance of Exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv)," June 20, 2019 (Accession No. ML19113A204)

Table 1

Holtec Decommissioning International

**Oyster Creek Nuclear Generating Station
Annual Decommissioning Financial Assurance and
Spent Fuel Management Report**

ENCLOSURE 1

Table 1

Holtec Decommissioning International, LLC
Oyster Creek Nuclear Generating Station



Summary Information as of December 31, 2021
10 CFR 50.82(a)(8)(v)-(vii)

Decommissioning Trust Fund Balance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(A) / (vii)(A)

Year	Type of Trust	Fund Balance (2021 \$)	Comments
2021	Decommissioning Trust	\$593M	As of 12/31/2021; net of tax liabilities

Other Financial Assurance Methods Being Relied Upon 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

NONE

HDI Decommissioning Expenditures 10 CFR 50.82(a)(8)(v)(A) Since License Transfer

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2019	\$54M	\$8M	\$0M	\$62M	2019 Costs in as-Spent Dollars
2020	\$105M	\$79M	\$8M	\$192M	2020 Costs in as-Spent Dollars
2021	\$115M	\$125M	\$3M	\$242M	2021 Costs in as-Spent Dollars
Total to Date	\$273M	\$212M	\$11M	\$496M	As-Spent Dollars

Prior Year Expenditures Variance to Total HDI Estimated Cost 10 CFR 50.82(a)(8)(v)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021 Estimated	\$127M	\$97M	\$16M	\$240M	Estimate in 2020 Dollars
2021 Actuals	\$115M	\$125M	\$3M	\$242M	Variance due to Project Timing and Optimization

Remaining Decommissioning Estimated Cost 10 CFR 50.82(a)(8)(v)(B) / (vii)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2022	\$224M	\$187M	\$32M	\$444M	Estimate in 2021 Dollars. Columns may not add due to rounding.

Decommissioning Criteria Upon Which the Estimate is Based 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

DECON

Any Modification to Method of Providing Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C)

NONE

Any Material Changes to Trust Agreement Since Previous Report 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(D)

No material changes

Need for Additional Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C) / (vii)(C)

NONE

Table 2

**Holtec Decommissioning International
Oyster Creek Nuclear Generating Station
Annual Decommissioning Cash Flow Analysis**

ENCLOSURE 1								
Table 2								
Oyster Creek Nuclear Generating Station - DECON Method								
Annual Cash Flow in Millions (2021 Dollars)								
Year	License Termination Cost	Spent Fuel Management Cost	Site Restoration Cost	Total Costs	Beginning of Year NDT Balance	Withdrawals	NDT Earnings ¹	Year Ending NDT Balance
2022	81	39	6	125	593 ²	-241 ³	7	359
2023	41	10	7	58	359	-58	6	308
2024	50	9	9	68	308	-68	5	245
2025	41	8	10	59	245	-59	4	190
2026	0	9	0	9	190	-9	4	185
2027	0	8	0	8	185	-8	4	180
2028	0	8	0	8	180	-8	3	176
2029	0	8	0	8	176	-8	3	171
2030	0	8	0	8	171	-8	3	167
2031	0	8	0	8	167	-8	3	162
2032	0	8	0	8	162	-8	3	157
2033	9	28	0	37	157	-37	2	122
2034	2	28	0	30	122	-30	2	95
2035	1	9	1	11	95	-11	2	85
Total⁴	224	187	32	444		-559	51	

¹ NDT earnings reflect an assumed 2% Real Rate of Return (RRR)

² 2022 Beginning of Year NDT Balance is net of realized tax liabilities

³ The 2022 NDT Withdrawal Amount includes \$116M for the reimbursement of HDI's 2021 expenses that were not reimbursed in 2021.

⁴ Columns may not add due to rounding

Enclosure 2

Holtec Decommissioning International

**Pilgrim Nuclear Power Station
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
As of December 31, 2021**

Holtec Decommissioning International
Pilgrim Nuclear Power Station
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
As of December 31, 2021

As required by 10 CFR 50.75(f), 50.82(a)(7), and 50.82(a)(8), Holtec Decommissioning International (HDI) reports the following information for Pilgrim Nuclear Power Station:

A. Formula Cost Amount per 10 CFR 50.75(c)

Pursuant to 10 CFR 50.75(c), the 2022 estimated NRC formula cost is \$649,738,251. HDI does not use this calculation for any decommissioning cost estimates or evaluations.

B. Current Decommissioning Cost Estimate

The required minimum funding assurance amount for Pilgrim as of December 31, 2021, is based on the site-specific Decommissioning Cost Estimate (DCE) developed in accordance with 10 CFR 50.82(a) and included in the HDI revised Post-Shutdown Decommissioning Activities Report (PSDAR) (Reference 1) and updated in the 2020 Annual Decommissioning and Spent Fuel Management Report (Reference 2). Additional reporting requirements are documented on Table 1 of this Enclosure. Table 1 provides HDI's revised total estimate information as required by 10 CFR 50.82. The revised total estimate to complete decommissioning for the Pilgrim site is \$661M (in 2021 dollars) as shown in cash flow analysis in Table 2. Of that total cost estimate, the revised estimate for license termination expenses is \$292M, the current separate estimate of spent fuel management costs is \$342M and the current separate estimate for site restoration costs is \$28M.

C. Current Decommissioning Fund Balance

The Pilgrim Nuclear Decommissioning Trust (NDT) fund balance as of December 31, 2021, was \$825M. This amount represents the market value of the NDT fund as of December 31, 2021, net of any material current income tax liability on realized gains, interest, dividends, and other income of the trust. No additional amounts remain to be collected. The trust fund amount is the total available for decommissioning including costs of license termination decommissioning, spent fuel management, and site restoration activities. The total is provided because HDI received an exemption from 10 CFR 50.82(a)(8)(i)(A) to allow the Pilgrim Trust fund to be used for site irradiated fuel management and site restoration costs (Reference 3).

D. Assumptions Used Regarding Rates of Escalation for Decommissioning Costs, Earnings on Funds, and Other Factors Used in Funding Projections

HDI has assumed a 2% real rate of return as allowed by 10 CFR 50.75(e)(1)(i).

E. Rates used to Inflate Decommissioning Costs

The estimates in the 2018 HDI Pilgrim Revised PSDAR/DCE (Reference 1) were provided in 2018 dollars. The estimates provided in Table 1 of this Enclosure have been inflated to 2021 dollars. The Bureau of Labor Statistics (BLS) data provided the basis for the decommissioning cost estimate inflation rate forecast. Decommissioning costs are inflated using a weighted average of BLS indices for Labor, Energy, Consumer Price Index, Materials, and Equipment. For Burial inflation factor, HDI utilized NUREG-1307, Revision 18. HDI has used a factor of 1.02 to calculate the inflation to 2021 dollars. This is conservative as it does not credit the fixed price contracts.

F. Current ISFSI Decommissioning Cost

The current site-specific Independent Spent Fuel Storage Installation (ISFSI) decommissioning cost estimate is \$4.4M (2021 dollars). The ISFSI estimated costs are based on the estimated costs provided in the HDI Revised PSDAR/DCE (Reference 1) and amended in (Reference 2) which have been inflated using published inflation indices as previously discussed in item (E).

G. Decommissioning Financial Assurance

Financial assurance for decommissioning is provided by the prepayment method, coupled with an external trust fund, in accordance with 10 CFR 50.75(e)(1)(i) and 10 CFR 72.30(e)(1) as approved by NRC in their approval of the license transfer to Holtec Pilgrim, LLC and HDI.

H. Changes in the Decommissioning Funding Plan Trust Agreement

No change.

Refer to Tables 1 and 2 of this Enclosure for additional required reporting data. Table 2 provides a cash flow analysis using the revised decommissioning cost estimates developed by HDI. This cash flow analysis demonstrates that the Pilgrim decommissioning trust fund is sufficiently funded to cover costs as estimated for the license termination, spent fuel management and site restoration activities necessary to complete safe and compliant decommissioning of the site.

In accordance with 10 CFR 50.82(a)(7), HDI is notifying the NRC of a schedule change from that described in the Pilgrim Revised PSDAR (Reference 1). HDI has updated its schedule to reflect the current decommissioning plan. The schedule revisions reflect actual work progress achieved since HDI's acquisition of the site and includes revisions to the work plan resulting from more detailed project planning and optimization since HDI's submittal of the Pilgrim Revised PSDAR (Reference 1). The PSDAR (Reference 1) indicates that segmentation activities for the Reactor Vessel Internals (RVI) and Reactor Pressure Vessel (RPV) will complete in 2020 and 2022, respectively. HDI will now complete RVI segmentation in 2022 and will further evaluate optimization of RPV segmentation and commence segmentation activities associated with the RPV in 2024. Enclosure 5 provides the major decommissioning project milestones and their updated scheduled completion dates.

The estimate to complete and cash flow analyses provided in Tables 1 and 2 confirm that the schedule revisions in Enclosure 5 are not financially significant as defined in 10 CFR 50.82(a)(7). HDI also has confirmed that the changes to the schedule remain bounded by the environmental evaluation included in the HDI Pilgrim PSDAR (Reference 1).

References:

1. Letter, Holtec Decommissioning International, LLC to US NRC, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Pilgrim Nuclear Power Station," November 16, 2018 (Accession No. ML18320A040)
2. Letter, Holtec Decommissioning International, LLC to US NRC, "Holtec Decommissioning International Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations," March 31, 2021 (Accession No. ML21090A336)
3. Letter from US NRC to Entergy Nuclear Operations, Inc., "Pilgrim Nuclear Power Station— Request for Exemption from 10 CFR 50.82(a)(8)(i)(A) for Holtec Decommissioning International, LLC," August 22, 2019 (Accession No. ML19192A083)

Table 1

Holtec Decommissioning International

**Pilgrim Nuclear Power Station
Annual Decommissioning Financial Assurance and
Spent Fuel Management Report**

ENCLOSURE 2

Table 1

Holtec Decommissioning International, LLC
Pilgrim Nuclear Power Station

Summary Information as of December 31, 2021
10 CFR 50.82(a)(8)(v)-(vii)


Decommissioning Trust Fund Balance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(A) / (vii)(A)

Year	Type of Trust	Fund Balance (2021 \$)	Comments
2021	Decommissioning Trust	\$825M	As of 12/31/2021; net of tax liabilities

Other Financial Assurance Methods Being Relied Upon 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

NONE

HDI Decommissioning Expenditures 10 CFR 50.82(a)(8)(v)(A) Since License Transfer

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2019	\$45M	\$56M	\$0M	\$101M	2019 Costs in as-Spent Dollars
2020	\$106M	\$67M	\$3M	\$175M	2020 Costs in as-Spent Dollars
2021	\$105M	\$113M	\$2M	\$221M	2021 Costs in as-Spent Dollars
Total Spent to Date	\$256M	\$237M	\$5M	\$497M	As-Spent Dollars

Prior Year Expenditures Variance to Total HDI Estimated Cost 10 CFR 50.82(a)(8)(v)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021 Estimated	\$140M	\$92M	\$3M	\$235M	Estimate in 2020 Dollars
2021 Actuals	\$105M	\$113M	\$2M	\$221M	

Remaining Decommissioning Estimated Cost 10 CFR 50.82(a)(8)(v)(B) / (vii)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2022	\$292M	\$342M	\$28M	\$661M	Estimated in 2021 Dollars. Columns may not add due to rounding.

Decommissioning Criteria Upon Which the Estimate is Based 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

DECON

Any Modification to Method of Providing Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C)

NONE

Any Material Changes to Trust Agreement Since Previous Report 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(D)

No material changes.

Need for Additional Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C) / (vii)(C)

NONE

Table 2

Holtec Decommissioning International

**Pilgrim Nuclear Power Station
Annual Decommissioning Cash Flow Analysis**

ENCLOSURE 2

Table 2

Pilgrim Nuclear Power Station - DECON Method
Annual Cash Flow in Millions (2021 Dollars)

Year	License Termination Cost	Spent Fuel Management Cost	Site Restoration Cost	Total Costs	Beginning of Year NDT Balance	Withdrawals	NDT Earnings ¹	Year Ending NDT Balance
2022	91	29	7	127	825 ²	-297 ³	11	539
2023	39	11	7	56	539	-56	10	492
2024	43	10	7	60	492	-60	9	441
2025	48	10	3	61	441	-61	8	388
2026	42	10	2	54	388	-54	7	341
2027	14	8	1	24	341	-24	6	323
2028		6		6	323	-6	6	323
2029		6		6	323	-6	6	323
2030		8		8	323	-8	6	322
2031		8		8	322	-8	6	321
2032		8		8	321	-8	6	319
2033		8		8	319	-8	6	318
2034		8		8	318	-8	6	317
2035		8		8	317	-8	6	315
2036		8		8	315	-8	6	314
2037		8		8	314	-8	6	313
2038		8		8	313	-8	6	311
2039		8		8	311	-8	6	310
2040		8		8	310	-8	6	308
2041		8		8	308	-8	6	307
2042		8		8	307	-8	6	305
2043		8		8	305	-8	6	303
2044		8		8	303	-8	6	302
2045		8		8	302	-8	6	300
2046		8		8	300	-8	6	298
2047		8		8	298	-8	6	297
2048		8		8	297	-8	6	295
2049		8		8	295	-8	6	293
2050		8		8	293	-8	6	291
2051		8		8	291	-8	6	289
2052		8		8	289	-8	6	287
2053		8		8	287	-8	6	285
2054		8		8	285	-8	6	283
2055		8		8	283	-8	6	281
2056		8		8	281	-8	5	279
2057		8		8	279	-8	5	277
2058		8		8	277	-8	5	275
2059		8		8	275	-8	5	273
2060	5	8		12	273	-12	5	266
2061	5	8		12	266	-12	5	259
2062	5	8		12	259	-12	5	252
2063	1	3	1	4	252	-4	5	252
Total⁴	292	342	28	661		-832	259	

¹ NDT earnings reflect an assumed 2% Real Rate of Return (RRR)² 2022 Beginning of Year NDT Balance is net of realized tax liabilities³ The 2022 NDT Withdrawal Amount includes \$170M for the reimbursement of HDI's 2021 expenses that were not reimbursed in 2021.⁴ Columns may not add due to rounding

Enclosure 3

Holtec Decommissioning International

**Indian Point Nuclear Generating Station Units 1, 2, and 3
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
As of December 31, 2021**

Holtec Decommissioning International
Indian Point Nuclear Generating Station Units 1, 2 & 3
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
As of December 31, 2021

As required by 10 CFR 50.75(f), 50.82(a)(7), and 50.82(a)(8), Holtec Decommissioning International (HDI) reports the following information for Indian Point Nuclear Generating Station Units 1, 2 and 3:

A. Formula Cost Amount per 10 CFR 50.75(c)

Pursuant to 10 CFR 50.75(c), the 2022 estimated NRC formula cost for Unit 1 is \$453,129,154, for Unit 2 is \$547,085,134, and for Unit 3 is \$547,085,134. HDI does not use this calculation for any decommissioning cost estimates or evaluations.

B. Current Decommissioning Cost Estimate

The required minimum funding assurance amount for Indian Point Units 1, 2 & 3 (IP1, IP2, and IP3), collectively referred to as Indian Point Energy Center (IPEC) as of December 31, 2021, is based on the site-specific Decommissioning Cost Estimate (DCE) developed in accordance with 10 CFR 50.82(a) and included in the HDI Post-Shutdown Decommissioning Activities Report (PSDAR) (Reference 1). Additional reporting requirements are documented on Tables 1A through 1C of this Enclosure. Tables 1A through 1C provide HDI's revised total estimate information as required by 10 CFR 50.82.

The revised total estimate to complete decommissioning for IP1 is \$604M (in 2021 dollars) as shown in cash flow analysis in Table 2A. Of that total cost estimate, the revised estimate for license termination expenses is \$485M, the current separate estimate of spent fuel management costs is \$76M and the current separate estimate for site restoration costs is \$43M.

For IP2, the revised total estimate to complete decommissioning for is \$721M (in 2021 dollars) as shown in cash flow analysis in Table 2B. Of that total cost estimate, the revised estimate for license termination expenses is \$475M, the current separate estimate of spent fuel management costs is \$199M and the current separate estimate for site restoration costs is \$46M.

For IP3, the revised total estimate to complete decommissioning for is \$957M (in 2021 dollars) as shown in cash flow analysis in Table 2C. Of that total cost estimate, the revised estimate for license termination expenses is \$582M, the current separate estimate of spent fuel management costs is \$327M and the current separate estimate for site restoration costs is \$48M.

C. Current Decommissioning Fund Balance

The IP1 Nuclear Decommissioning Trust (NDT) fund balance as of December 31, 2021, was \$655M, the IP2 NDT fund balance as of December 31, 2021, was \$786M, and the IP3 NDT fund balance as of December 31, 2021, was \$931M. These amounts represent the market value of the NDT fund as of December 31, 2021, net of any material current income tax liability on realized gains, interest, dividends, and other income of the trust. No additional amounts remain to be collected. The trust fund amount is the total available for decommissioning including costs of license termination decommissioning, spent fuel management, and site restoration activities. The total is provided because HDI received an exemption from 10 CFR 50.82(a)(8)(i)(A) to allow each of the respective Indian Point Trust funds to be used for site irradiated fuel management and site restoration costs (Reference 3).

D. Assumptions Used Regarding Rates of Escalation for Decommissioning Costs, Earnings on Funds, and Other Factors Used in Funding Projections

HDI has assumed a 2% real rate of return as allowed by 10 CFR 50.75(e)(1)(i).

E. Rates used to Inflate Decommissioning Costs

The estimates in the 2019 HDI IPEC PSDAR/DCE (Reference 1) were provided in 2019 dollars. The estimates provided in Tables 1A through 1C of this Enclosure have been inflated to 2021 dollars. The Bureau of Labor Statistics (BLS) data provided the basis for the decommissioning cost estimate inflation rate forecast. Decommissioning costs are inflated using a weighted average of BLS indices for Labor, Energy, Consumer Price Index, Materials, and Equipment. For Burial inflation factor, HDI utilized NUREG-1307, Revision 18. HDI has used a factor of 1.06 to calculate the inflation to 2021 dollars. This is conservative as it does not credit the fixed price contracts.

F. Current ISFSI Decommissioning Cost

The current site-specific Independent Spent Fuel Storage Installation (ISFSI) decommissioning cost estimate is \$5.992M (2021 dollars). The ISFSI estimated costs are based on the estimated costs provided in the HDI PSDAR/DCE (Reference 1) which were inflated using published inflation indices as previously discussed in item (E).

G. Decommissioning Financial Assurance

Financial assurance for decommissioning is provided by the prepayment method, coupled with an external trust fund, in accordance with 10 CFR 50.75(e)(1)(i) and 10 CFR 72.30(e)(1) as approved by NRC in their approval of the license transfer to Holtec Indian Point 2, LLC, Holtec Indian Point 3, LLC, and HDI.

H. Changes in the Decommissioning Funding Plan Trust Agreement

After the license transfer and sale of the Indian Point site to Indian Point 2, LLC and Indian Point 3, LLC, the Provisional Decommissioning Trust for Nuclear Generating Units 1 & 2 expended all non-qualified funds for Unit 1. The custodian, BNY Mellon, was directed to terminate the trust since all the non-qualified funds were expended for Unit 1. The NRC was notified of the termination request to the custodian, BNY Mellon on November 10, 2021 (Reference 4). The termination of the Provisional Trust does not affect the funds governed by the Master Decommissioning Trust Agreement, which includes the Unit 1 qualified funds.

Refer to Tables 1A through 1C and 2A through 2C of this Enclosure for additional required reporting data for IP1, IP2 and IP3. Tables 2A through 2C provide cash flow analyses using revised decommissioning cost estimates developed by HDI. These cash flow analyses demonstrate that the IP1, IP2 and IP3 decommissioning trust funds are sufficiently funded to cover costs as estimated for the license termination, spent fuel management and site restoration activities necessary to complete safe and compliant decommissioning of IPEC.

In accordance with 10 CFR 50.82(a)(7), HDI is notifying the NRC of revisions to the decommissioning schedule from that described in the IPEC PSDAR. (Reference 1). HDI has updated its schedule to reflect the current decommissioning plan. The schedule revisions reflect actual work progress achieved since HDI's acquisition of the site and includes revisions to the work plan resulting from more detailed project planning and optimization since HDI's submittal of the IPEC PSDAR/DCE (Reference 1). HDI will further evaluate optimization of Reactor Pressure Vessel (RPV) segmentation and will now complete segmentation activities for the Reactor Vessel Internals and the RPV for Units 2 and 3 in 2024 and Unit 1 in 2025. Enclosure 5 provides the major decommissioning project milestones and their updated scheduled completion dates.

The estimate to complete and cash flow analyses provided in Tables 1A through 1C and 2A through 2C confirm that these schedule revisions are not financially significant as defined in 10 CFR 50.82 (a)(7). HDI also has confirmed that the changes to the schedule remain bounded by the environmental evaluation included in the HDI IPEC PSDAR (Reference 1).

References:

1. Letter, Holtec Decommissioning International, LLC to US NRC, "Post Shutdown Decommissioning Activities Report including Site-Specific Decommissioning Cost Estimate for Indian Point Nuclear Generating Units 1, 2, and 3," December 19, 2019 (Accession No. ML19354A698)
2. Letter, Entergy to US NRC, "Decommissioning Funding Status Report per 10 CRF 50.75(f)(1) and 10 CFR 50.82(a)(8)(v) – Entergy Nuclear Operations Inc," March 25, 2020 (Accession No. ML21084A811)
3. Letter from US NRC to HDI, "Indian Point Nuclear Generating Station, Unit Nos. 1, 2 and 3 —Request for Exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) for Holtec Decommissioning International, LLC" November 23, 2020 (Accession No. ML20309A781)
4. Letter, Holtec Decommissioning International, LLC to US NRC, "Notice of Termination of Provisional Trust Agreement," November 10, 2021 (Accession No. ML21314A416)

Tables 1A, 1B, and 1C

Holtec Decommissioning International

**Indian Point Nuclear Generating Station Units 1, 2 & 3
Annual Decommissioning Financial Assurance and
Spent Fuel Management Report**

ENCLOSURE 3

Table 1A

Holtec Decommissioning International, LLC
Indian Point Nuclear Generating Station Unit 1



Summary Information as of December 31, 2021
10 CFR 50.82(a)(8)(v)-(vii)

Decommissioning Trust Fund Balance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(A) / (vii)(A)

Year	Type of Trust	Fund Balance (2021 \$)	Comments
2021	Decommissioning Trust	\$655M	As of 12/31/2021; net of tax liabilities

Other Financial Assurance Methods Being Relied Upon 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

NONE

HDI Decommissioning Expenditures 10 CFR 50.82(a)(8)(v)(A) Since License Transfer

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021	\$18M	\$2M	\$0M	\$20M	2021 Costs in as-Spent Dollars
Total to Date	\$18M	\$2M	\$0M	\$20M	As-Spent Dollars

Prior Year Expenditures Variance to Total HDI Estimated Cost 10 CFR 50.82(a)(8)(v)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021 Estimated	\$30M	\$3M	\$0M	\$33M	Estimate in 2019 Dollars
2021 Actuals	\$18M	\$2M	\$0M	\$20M	

Remaining Decommissioning Estimated Cost 10 CFR 50.82(a)(8)(v)(B) / (vii)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2022	\$485M	\$76M	\$43M	\$604M	Estimated in 2021 Dollars

Decommissioning Criteria Upon Which the Estimate is Based 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

DECON

Any Modification to Method of Providing Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C)

NONE

Any Material Changes to Trust Agreement Since Previous Report 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(D)

No material changes. See item (H) in Enclosure 3

Need for Additional Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C) / (vii)(C)

NONE

ENCLOSURE 3

Table 1B

Holtec Decommissioning International, LLC
Indian Point Nuclear Generating Station Unit 2



Summary Information as of December 31, 2021
10 CFR 50.82(a)(8)(v)-(vii)

Decommissioning Trust Fund Balance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(A) / (vii)(A)

Year	Type of Trust	Fund Balance (2021 \$)	Comments
2021	Decommissioning Trust	\$786M	As of 12/31/2021; net of tax liabilities

Other Financial Assurance Methods Being Relied Upon 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

NONE

HDI Decommissioning Expenditures 10 CFR 50.82(a)(8)(v)(A) Since License Transfer

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021	\$33M	\$20M	\$0M	\$53M	2021 Costs in as-Spent Dollars
Total to Date	\$33M	\$20M	\$0M	\$53M	As-Spent Dollars

Prior Year Expenditures Variance to Total HDI Estimated Cost 10 CFR 50.82(a)(8)(v)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021 Estimated	\$43M	\$27M	\$0M	\$70M	Estimate in 2019 Dollars
2021 Actuals	\$33M	\$20M	\$0M	\$53M	

Remaining Decommissioning Estimated Cost 10 CFR 50.82(a)(8)(v)(B) / (vii)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2022	\$475M	\$199M	\$46M	\$721M	Estimated in 2021 Dollars. Columns may not add due to rounding.

Decommissioning Criteria Upon Which the Estimate is Based 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

DECON

Any Modification to Method of Providing Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C)

NONE

Any Material Changes to Trust Agreement Since Previous Report 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(D)

No material changes. See item (H) in Enclosure 3

Need for Additional Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C) / (vii)(C)

NONE

ENCLOSURE 3

Table 1C

Holtec Decommissioning International, LLC
Indian Point Nuclear Generating Station Unit 3



Summary Information as of December 31, 2021
10 CFR 50.82(a)(8)(v)-(vii)

Decommissioning Trust Fund Balance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(A) / (vii)(A)

Year	Type of Trust	Fund Balance (2021 \$)	Comments
2021	Decommissioning Trust	\$931M	As of 12/31/2021; net of tax liabilities

Other Financial Assurance Methods Being Relied Upon 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

NONE

HDI Decommissioning Expenditures 10 CFR 50.82(a)(8)(v)(A) Since License Transfer

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021	\$38M	\$63M	\$0M	\$101M	2021 Costs in as-Spent Dollars
Total to Date	\$38M	\$63M	\$0M	\$101M	As-Spent Dollars

Prior Year Expenditures Variance to Total HDI Estimated Cost 10 CFR 50.82(a)(8)(v)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2021 Estimated	\$64M	\$47M	\$0M	\$111M	Estimate in 2019 Dollars
2021 Actuals	\$38M	\$63M	\$0M	\$101M	

Remaining Decommissioning Estimated Cost 10 CFR 50.82(a)(8)(v)(B) / (vii)(B)

Year	License Termination	Spent Fuel Mgmt	Site Restoration	Total	Comments
2022	\$582M	\$327M	\$48M	\$957M	Estimated in 2021 Dollars

Decommissioning Criteria Upon Which the Estimate is Based 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(B)

DECON

Any Modification to Method of Providing Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C)

NONE

Any Material Changes to Trust Agreement Since Previous Report 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(D)

No material changes. See item (H) in Enclosure 3

Need for Additional Financial Assurance 10 CFR 50.75(f)(1) and 10 CFR 50.82(a)(8)(v)(C) / (vii)(C)

NONE

Tables 2A, 2B, and 2C

Holtec Decommissioning International

**Indian Point Nuclear Generating Station Units 1, 2 & 3
Annual Decommissioning Cash Flow Analyses**

ENCLOSURE 3

Table 2A

Indian Point Nuclear Generating Station Unit 1 - DECON Method
Annual Cash Flow in Millions (2021 Dollars)

Year	License Termination Cost	Spent Fuel Management Cost	Site Restoration Cost	Total Costs	Beginning of Year NDT Balance	Withdrawals	NDT Earnings ¹	Year Ending NDT Balance
2022	52	2	1	55	655 ²	-68 ³	12	599
2023	50	7	2	59	599	-59	11	551
2024	68	2	5	75	551	-75	10	486
2025	22	2	6	29	486	-29	9	466
2026	26	2	5	33	466	-33	9	441
2027	34	2	5	41	441	-41	8	408
2028	31	2	5	38	408	-38	7	378
2029	23	2	5	29	378	-29	7	355
2030	52	2	2	56	355	-56	6	306
2031	77	2	2	80	306	-80	5	230
2032	39	2	6	46	230	-46	4	188
2033	2	5		7	188	-7	4	184
2034		3		3	184	-3	4	185
2035		3		3	185	-3	4	186
2036		3		3	186	-3	4	186
2037		3		3	186	-3	4	187
2038		3		3	187	-3	4	187
2039		3		3	187	-3	4	188
2040		3		3	188	-3	4	189
2041		3		3	189	-3	4	189
2042		3		3	189	-3	4	190
2043		3		3	190	-3	4	191
2044		3		3	191	-3	4	191
2045		3		3	191	-3	4	192
2046		5		5	192	-5	4	190
2047	.2	5		5	190	-5	4	189
2048	.4			.4	189		4	193
2049	.4			.4	193		4	196
2050	.4			.4	196		4	200
2051	.4			.4	200		4	203
2052	.4			.4	203		4	207
2053	.4			.4	207		4	211
2054	.4			.4	211		4	214
2055	1			1	214	-1	4	218
2056	1			1	218	-1	4	222
2057	1			1	222	-1	4	225
2058	1			1	225	-1	4	229
2059	1			1	229	-1	5	233
2060	1			1	233	-1	5	237
2061	1			1	237	-1	5	241
2062	.3		.1	.3	241		5	245
Total⁴	485	76	43	604		-616	211	

¹ NDT earnings reflect an assumed 2% Real Rate of Return (RRR)² 2022 Beginning of Year NDT Balance is net of realized tax liabilities³ The 2022 NDT Withdrawal Amount includes \$13M for the reimbursement of HDI's 2021 expenses that were not reimbursed in 2021.⁴ Columns may not add due to rounding

ENCLOSURE 3

Table 2B

Indian Point Nuclear Generating Station Unit 2 - DECON Method
Annual Cash Flow in Millions (2021 Dollars)

Year	License Termination Cost	Spent Fuel Management Cost	Site Restoration Cost	Total Costs	Beginning of Year NDT Balance	Withdrawals	NDT Earnings ¹	Year Ending NDT Balance
2022	119	78	2	199	786 ²	-228 ³	11	569
2023	60	2	6	68	569	-68	10	511
2024	41	2	7	50	511	-50	9	470
2025	29	2	7	37	470	-37	9	441
2026	33	2	7	41	441	-41	8	408
2027	34	2	5	41	408	-41	7	374
2028	52	2	2	55	374	-55	6	325
2029	53	2	2	56	325	-56	5	274
2030	9	7		16	274	-16	5	263
2031	9	7		16	263	-16	5	252
2032	6	6	7	20	252	-20	5	237
2033	2	8		10	237	-10	5	232
2034		6		6	232	-6	5	230
2035		6		6	230	-6	4	228
2036		6		6	228	-6	4	226
2037		6		6	226	-6	4	224
2038		6		6	224	-6	4	222
2039		6		6	222	-6	4	220
2040		6		6	220	-6	4	218
2041		6		6	218	-6	4	216
2042		6		6	216	-6	4	214
2043		6		6	214	-6	4	211
2044		6		6	211	-6	4	209
2045		6		6	209	-6	4	207
2046		3		3	207	-3	4	207
2047	.2	1		1	207	-1	4	211
2048	.4			.4	211		4	214
2049	.4			.4	214		4	218
2050	.4			.4	218		4	222
2051	.4			.4	222		4	226
2052	.4			.4	226		5	230
2053	.4			.4	230		5	235
2054	.4			.4	235		5	239
2055	3			3	239	-3	5	240
2056	3			3	240	-3	5	241
2057	3			3	241	-3	5	243
2058	3			3	243	-3	5	244
2059	3			3	244	-3	5	245
2060	3			3	245	-3	5	247
2061	3			3	247	-3	5	248
2062	1		1	2	248	-2	5	251
Total⁴	475	199	46	721		-750	220	

¹ NDT earnings reflect an assumed 2% Real Rate of Return (RRR)² 2022 Beginning of Year NDT Balance is net of realized tax liabilities³ The 2022 NDT Withdrawal Amount includes \$29M for the reimbursement of HDI's 2021 expenses that were not reimbursed in 2021.⁴ Columns may not add due to rounding

ENCLOSURE 3

Table 2C

Indian Point Nuclear Generating Station Unit 3 - DECON Method
Annual Cash Flow in Millions (2021 Dollars)

Year	License Termination Cost	Spent Fuel Management Cost	Site Restoration Cost	Total Costs	Beginning of Year NDT Balance	Withdrawals	NDT Earnings ¹	Year Ending NDT Balance
2022	155	36	3	195	931 ²	-243 ³	14	702
2023	70	33	3	106	702	-106	12	608
2024	54	1	4	59	608	-59	11	560
2025	49	2	4	54	560	-54	10	515
2026	54	1	4	59	515	-59	9	466
2027	45	2	4	50	466	-50	8	424
2028	27	2	4	33	424	-33	8	399
2029	27	2	4	33	399	-33	7	373
2030	27	2	4	33	373	-33	7	347
2031	27	2	4	33	347	-33	6	320
2032	23	2	8	33	320	-33	6	293
2033	3	5		8	293	-8	6	291
2034		4		4	291	-4	6	293
2035		4		4	293	-4	6	295
2036		4		4	295	-4	6	297
2037		4		4	297	-4	6	299
2038		4		4	299	-4	6	301
2039		4		4	301	-4	6	304
2040		4		4	304	-4	6	306
2041		4		4	306	-4	6	308
2042		4		4	308	-4	6	310
2043		4		4	310	-4	6	312
2044		4		4	312	-4	6	315
2045		4		4	315	-4	6	317
2046		5		5	317	-5	6	319
2047		8		8	319	-8	6	317
2048		13		13	317	-13	6	311
2049		13		13	311	-13	6	304
2050		13		13	304	-13	6	297
2051		13		13	297	-13	6	290
2052		13		13	290	-13	6	283
2053		13		13	283	-13	5	276
2054		13		13	276	-13	5	268
2055	3	13		16	268	-16	5	258
2056	3	13		16	258	-16	5	247
2057	3	13		16	247	-16	5	236
2058	3	13		16	236	-16	4	225
2059	3	13		16	225	-16	4	213
2060	3	13		16	213	-16	4	201
2061	3	13		16	201	-16	4	189
2062	1	3	1	4	189	-4	4	188
Total⁴	582	327	48	957		-1005	266	

¹ NDT earnings reflect an assumed 2% Real Rate of Return (RRR)² 2022 Beginning of Year NDT Balance is net of realized tax liabilities³ The 2022 NDT Withdrawal Amount includes \$48M for the reimbursement of HDI's 2021 expenses that were not reimbursed in 2021.⁴ Columns may not add due to rounding

Enclosure 4

Holtec Decommissioning International

**Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report**

Methodology Used to Calculate the Formula Cost Amount per 10 CFR 50.75(c)

Holtec Decommissioning International
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
Methodology Used to Calculate the Formula Cost Amount per 10 CFR 50.75(c)

The labor, energy and burial indexes used are consistent with those described in NUREG-1307, Revision 18, issued January 2021.

The current labor cost indexes used are obtained from the Employment Cost Index published by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). Specifically, HDI used the Employment Cost Index for total compensation for private industry workers in the Northeast Region. The labor adjustment factors were calculated according to Section 3.2 of NUREG-1307, Revision 18 using fourth quarter 2021 data. Table 1 shows the data used for this calculation.

Table 1: Northeast Region Labor Adjustment Factor

Applicable Site	Series ID	4Q2021 Index Number	Labor Adjustment Factor (L _x)
Oyster Creek	CIU201000000210I	149.6	3.23
Pilgrim	CIU201000000210I	149.6	3.23
IPEC	CIU201000000210I	149.6	3.23

The current energy cost indexes used are obtained from Producer Price Indexes (PPI) – Commodities, published by the U.S. Department of Labor, BLS. Specifically, HDI used the PPI for industrial electric power (WPU0543) and light fuel oils (WPU0573). The energy adjustment factors were calculated according to Section 3.3 of NUREG-1307, Revision 18, using December 2021 data. Table 2 shows the data used for this calculation.

Table 2: Energy Adjustment Factor

WPU0543 – January 1986 (base value)	114.2
WPU0573 – January 1986 (base value)	82.0
WPU0543 – December 2021 (preliminary value)	251.614
WPU0573 – December 2021 (preliminary value)	322.997
Industrial Electric Power Adjustment Factor – (PX)	2.203
Light Fuel Oil Adjustment Factor – (FX)	3.939
Energy Adjustment Factor – (BWR)	3.002
Energy Adjustment Factor – (PWR)	2.932

The waste burial adjustment factors are taken from Table 2-1 of NUREG-1307, Revision 18, based on 2021 data. The adjustment factors HDI used assume a combination of compact-affiliated and non- compact facilities as applicable. Table 3 shows the data used for this calculation.

Table 3: Waste Burial Adjustment Factor

LLW Burial Site	Reactor Type	Decommissioning Site	Combination of Compact-Affiliated and Non-Compact Disposal Facilities Waste Adjustment Factor – (Bx)	Generators Located in Unaffiliated States – (Bx)
South Carolina Atlantic Compact Site	BWR	Oyster Creek	12.948	N/A
Generic LLW	BWR	Pilgrim	N/A	12.837
Generic LLW	PWR	IPEC	N/A	12.793

The calculation methodology used for all adjustment factors is consistent with NUREG-1307, Revision 18.

Site	Escalation Factors - (Lx), (Ex), (Bx)		Escalation Factor Formula 10 CFR 50.75(c)(2)	Escalation Factor	1986 Base Year \$ Escalated * Factor
	(Lx)	(Ex), (Bx)			
Oyster Creek	(Lx)	3.23	0.65(L)+0.13(E)+0.22(B)	5.34	\$648,014,501
	(Ex)	3.002			
	(Bx)	12.948			
Pilgrim	(Lx)	3.23	0.65(L)+0.13(E)+0.22(B)	5.31	\$649,738,251
	(Ex)	3.002			
	(Bx)	12.837			
IPEC	(Lx)	3.23	0.65(L)+0.13(E)+0.22(B)	5.30	Unit 1 - \$453,129,154
	(Ex)	2.932			Unit 2 - \$547,085,134
	(Bx)	12.793			Unit 3 - \$547,085,134

Enclosure 5

Holtec Decommissioning International

**Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report**

Milestone Summary

Holtec Decommissioning International
Annual Decommissioning Funding and Spent Fuel Management
Status and Financial Assurance Report
Milestone Summary

Project / Milestone	PSDAR/DCE/LTA (per project below)	DCE Annual Updates (2021)	Notes
Oyster Creek (PSDAR/DCE/LTA issued on 09/28/2018)			
License Transfer	07/01/2019	07/01/2019	Complete
Zirc Fire Elimination	09/17/2019	06/29/2019	Complete
Fuel on Pad	06/23/2023	05/23/2021	Complete
Segmentation RVI	02/03/2022	05/13/2022	
Segmentation RPV	09/19/2022	08/19/2024	
Partial Site Release	10/24/2025	11/03/2025	
Fuel Shipment	03/28/2035	03/28/2035	
License Termination	12/01/2035	12/03/2035	
Pilgrim (PSDAR/DCE/LTA issued on 11/16/2018)			
License Transfer	07/31/2019	08/26/2019	Complete
Zirc Fire Elimination	03/30/2020	03/31/2020	Complete
Fuel on Pad	11/26/2021	12/13/2021	Complete
Segmentation RVI	10/12/2020	10/26/2022	
Segmentation RPV	09/18/2022	12/31/2024	
Partial Site Release	01/28/2025 [09/24/2027] *	09/24/2027	*Schedule change incorporated in 2019 Annual Decommissioning Funding & Spent Fuel Management Report (ML20091M858)
Fuel Shipment	12/31/2062	12/31/2062	
License Termination	09/07/2063	09/07/2063	
Indian Point (PSDAR/DCE/LTA issued on 12/19/2019)			
License Transfer	05/31/2021	05/28/2021	Complete
Zirc Fire Elimination (#3)	09/15/2022	08/01/2022	
Fuel on Pad (#3)	04/04/2024	10/31/2023	
Segmentation RVI (#2)	12/21/2022	05/28/2024	
Segmentation RPV (#1)	04/13/2024	11/20/2025	
Partial Site Release	07/09/2033	07/09/2033	
Fuel Shipment	12/30/2061	12/30/2061	
License Termination	09/06/2062	09/06/2062	