UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION AND OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

RELATED TO REQUEST FOR DIRECT TRANSFER OF CONTROL OF RENEWED FACILITY OPERATING LICENSE NO. DPR-16 AND THE GENERAL LICENSE FOR THE INDEPENDENT SPENT FUEL STORAGE INSTALLATION

FROM EXELON GENERATION COMPANY, LLC

TO OYSTER CREEK ENVIRONMENTAL PROTECTION, LLC AND HOLTEC DECOMMISSIONING INTERNATIONAL, LLC

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NOS. 50-219 AND 72-15

1.0 INTRODUCTION

By letter dated August 31, 2018 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML18243A489), including proprietary financial information provided as Enclosure 2A, "Asset Purchase and Sale Agreement By and Between Exelon Generation Company, LLC, Oyster Creek Environmental Protection, LLC, and Holtec International" (ADAMS Accession No. ML18243A490), Exelon Generation Company, LLC (EGC), Oyster Creek Environmental Protection, LLC (OCEP) and Holtec Decommissioning International, LLC (HDI) (together, "Applicants"), requested that the U.S. Nuclear Regulatory Commission (NRC) consent to the proposed direct transfer of the Oyster Creek Nuclear Generating Station (Oyster Creek) Renewed Facility Operating License No. DPR-16 and the Oyster Creek Independent Spent Fuel Storage Installation (ISFSI) general license (collectively referred to as the facility or Oyster Creek). Specifically, the Applicants requested that the NRC consent to the direct transfer of EGC's currently licensed authority (licensed owner and operator for decommissioning) to OCEP as the licensed owner and to HDI as the licensed operator for decommissioning. This direct transfer request is submitted to the NRC for approval pursuant to Section 184 of the Atomic Energy Act of 1954, as amended (AEA), "Inalienability of Licenses," and Title 10 of the *Code of Federal Regulations* (10 CFR) 50.80, "Transfer of licenses," 10 CFR 72.50, "Transfer of licenses," and 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit." Enclosure 2A of the application contains sensitive unclassified non-safeguards information (proprietary commercial and financial information) that is being withheld from public disclosure pursuant to 10 CFR 2.390.

In addition, the Applicants requested that the NRC approve a conforming amendment to the facility licenses to reflect this transfer from EGC to OCEP and HDI.

Following approval and implementation of the proposed direct transfer of control of the license, HDI will assume licensed responsibility as the operator of Oyster Creek, and OCEP will assume licensed responsibility as the owner of Oyster Creek. OCEP will enter into a

decommissioning operator services agreement with HDI, which will provide for HDI to act as OCEP's agent and for OCEP to pay HDI's costs of post-shutdown operations, including all decommissioning and spent fuel management costs.

Notice of NRC consideration[1] of the application was published in the *Federal Register* (FR) on October 19, 2018 (83 FR 53119) and included an opportunity to comment, request a hearing, and petition for leave to intervene. At the request of a Member of the U.S. Senate, as published in the FR on December 10, 2018 (83 FR 63544), the NRC reopened the comment period for an additional 30 days to allow more time for members of the public to develop and submit comments. The staff (the staff) reviewed the questions and comments received and considered them in the review process, as discussed in Section 12.0 of this safety evaluation. The themes of the questions and comments that were in the scope of the NRC's review, such as decommissioning funding and financial qualifications of Holtec, its partners, and subsidiaries, are addressed in this safety evaluation.

2.0 BACKGROUND

The Oyster Creek site is located approximately two miles south of Forked River, New Jersey, in Ocean County. Oyster Creek employed a Boiling Water Reactor (BWR-2) with a Mark I type containment licensed to generate 1,930 megawatts (thermal energy). The operating license for Oyster Creek was issued on April 9, 1969, and commercial operation commenced on December 23, 1969. The license was renewed on April 9, 2009.

By letter dated January 7, 2011 (ADAMS Accession No. ML110070507), "Certification of Permanent Cessation of Power Operations for Oyster Creek Nuclear Generating Station," EGC notified the NRC of its intent to prematurely and permanently cease power operations at Oyster Creek no later than December 31, 2019, pursuant to 10 CFR 50.82(a)(1)(i).

Pursuant to 10 CFR 50.75(f)(3) and 10 CFR 50.54(bb), EGC submitted a Preliminary Decommissioning Cost Estimate (PDCE) and Irradiated Fuel Management Plan (commonly referred to as the Spent Fuel Management Plan or SFMP) to the NRC on December 30, 2014 (ADAMS Accession No. ML14365A067), as supplemented by letter dated April 5, 2016, in a response to a request for additional information (ADAMS Accession No. ML16096A397). The NRC completed its review by letter dated July 6, 2016 (ADAMS Accession No. ML16131A750).

By letter dated February 14, 2018 (ADAMS Accession No. ML18045A084), EGC revised its certification to permanently cease power operations at Oyster Creek no later than October 31, 2018, pursuant to 10 CFR 50.82(a)(1)(i). Because of its decision to retire Oyster Creek one year earlier, and related changes to the anticipated schedule of decommissioning and spent fuel management activities, by letter dated May 21, 2018 (ADAMS Accession No. ML18141A486), EGC updated the Oyster Creek SFMP accordingly. Additionally, by letter dated May 21, 2018 (ADAMS Accession No. ML18141A775), EGC submitted for review the Post Shutdown Decommissioning Activities Report (2018 PSDAR), including the Site-Specific Decommissioning Cost Estimate (DCE), for Oyster Creek to the NRC. The 2018 PSDAR was submitted in accordance with the requirements of 10 CFR 50.82, "Termination of license," paragraph (a)(4)(i).

[1] This *FR* Notice has information regarding how to access sensitive unclassified non-safeguards information for contention preparation. No requests for such information were made.

The NRC completed its review of the updated Oyster Creek SFMP and PSDAR by letter dated December 17, 2018 (ADAMS Accession No. ML18241A068). This letter includes the NRC's continued approval of the Oyster Creek SFMP.

On September 25, 2018 (ADAMS Accession No. ML18268A258), pursuant to 10 CFR 50.82(a)(1)(ii), EGC certified to the NRC that it had permanently ceased operations at Oyster Creek on September 17, 2018, and that all fuel had been permanently removed from the reactor vessel and placed in the spent fuel pool. Exelon certified these actions and used an alternate method[2] for complying with the oath or affirmation requirement for certification as presented in the United States Code, Title 28, Section 1746 (28 USC 1746). In accordance with the 2018 PSDAR, EGC placed the Oyster Creek reactor in SAFSTOR[3] and planned to have all Oyster Creek spent fuel in dry storage in the onsite ISFSI by 2020, terminate the 10 CFR Part 50 license by 2078, and restore the site by 2080.

Application for License Transfer

According to the license transfer application, the purpose of the proposed transfer of the licenses is to permit the prompt radiological decommissioning of the non-ISFSI portions of the Oyster Creek site. Following approval and implementation of the license transfer, OCEP will purchase Oyster Creek and assume licensed responsibility as its owner. OCEP will enter into a decommissioning operator services agreement for decommissioning services with HDI, which provides for HDI to act as OCEP's agent and for OCEP to pay for all of HDI's costs of decommissioning, spent fuel management, and site restoration. Accordingly, HDI will become the licensed operator for decommissioning.

As the licensed operator, HDI will contract with Comprehensive Decommissioning International (CDI), a company jointly formed and owned by Holtec International (Holtec) and SNC-Lavalin Group (SNC-Lavalin). SNC-Lavalin, a foreign corporation, holds its interest in CDI through a wholly-owned U.S. subsidiary, Kentz USA Inc. CDI is majority owned by Holtec. Both Holtec and SNC-Lavalin are transferring employees to CDI. Pursuant to a Decommissioning General Contractor Agreement between HDI and CDI, CDI will manage and perform the day-to-day Oyster Creek licensed activities, including decommissioning activities, subject to HDI's direct oversight and control as the licensed operator.

Asset Purchase and Sale Agreement

According to the license transfer application, OCEP proposes to purchase Oyster Creek pursuant to the terms of an Asset Purchase and Sale Agreement (PSA) between EGC, OCEP, and Holtec. A copy of the PSA is provided in a separately-bound Addendum as Enclosure 2A to the
August 31, 2018, application. Enclosure 2A contains confidential commercial and financial information that is being withheld from public disclosure pursuant to 10 CFR 2.390. A redacted, non-proprietary version of the PSA is provided as Enclosure 2 of the application.

[2] This alternate method is discussed in Regulatory Information Summary 2001-01-18, RIS 01-018: "Requirements for Oath or Affirmation", dated August 22, 2001.
[3] SAFSTOR is a method of decommissioning in which a nuclear facility is placed and maintained in a condition that allows the facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for unrestricted use.

Revised PSDAR

In accordance with 10 CFR 50.82(a)(7), by letter dated September 28, 2018 (ADAMS Accession No. ML18275A116), HDI submitted a "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Oyster Creek Nuclear Generating Station," (revised PSDAR) to notify the NRC of changes and its intention to accelerate the schedule for the prompt decommissioning of Oyster Creek and unrestricted release of all portions of the site (excluding the ISFSI) within eight (8) years after license transfer. The revised PSDAR is based on and contingent upon NRC approval of this license transfer, and Oyster Creek being acquired by OCEP, pursuant to the terms of the PSA. On November 9, 2018 (ADAMS Accession No. ML18282A035), the NRC notified EGC that the staff is treating the revised PSDAR submittal dated September 28, 2018, as a supplement to the Oyster Creek license transfer application dated August 31, 2018, until such time as the NRC makes a regulatory decision regarding the Oyster Creek license transfer application.

3.0 REGULATORY EVALUATION

As described in the application, the proposed transaction constitutes a transfer of ownership interest of Oyster Creek, which requires prior NRC approval. For direct transfers of control of a license, the NRC must find that the direct transfer of the license is otherwise consistent with applicable provisions of law, NRC regulations, and orders issued by the Commission.

The request for approval of the transfer of the Oyster Creek license as described above, and as discussed in this safety evaluation, is made pursuant to 10 CFR 50.80(a), which states that:

> No license for a production or utilization facility (including, but not limited to, permits under this part and part 52 of this chapter), or any right thereunder, 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.

In addition, the regulations in 10 CFR 50.80(b) and (c) apply. The regulation at 10 CFR 50.80(b) states, in part:

> (1) An application for transfer of a license shall include:
>
> (i) For a construction permit or operating license under this part, as much of the information described in 50.33 and 50.34 of this part with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license.

Section 50.80(c) of 10 CFR states, in part, that:

> …the Commission will approve an application for the transfer of a license, if the Commission determines: (1) That the proposed transferee is qualified to be the holder of the license; and (2) That transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

Section 50.33(f) of 10 CFR states, in part, that:

> Except for an electric utility applicant for a license to operate a utilization facility of the type described in § 50.21(b) or § 50.22, [each application shall state] information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought.

The staff applies guidance in NUREG-1577, Revision 1, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance" (ADAMS Accession No. ML013330264), issued February 1999, to evaluate the financial qualifications of applicants to carry out the activities for which the permit or license is sought.

Section 50.54(bb) of 10 CFR requires, in part, a licensee to submit, for NRC review and preliminary approval, 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.

In accordance with 10 CFR 50.2, "Decommission," means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

Section 50.33(k)(1) of 10 CFR requires that applicants provide information, in the form of a report, as described in 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning," indicating how reasonable assurance will be provided that funds will be available to decommission the facility.

Section 50.75 of 10 CFR establishes requirements for indicating to NRC how a licensee will provide reasonable assurance that funds will be available for the decommissioning process. Section 50.75(b) requires that each power reactor applicant for an operating license submit a decommissioning report, as required by Section 50.33(k). Section 50.75(e) provides the methods acceptable to the NRC for providing decommissioning financial assurance. Finally, Section 50.75(h) provides additional requirements regarding the management of decommissioning trust funds.

Section 50.82(a)(8)(i) of 10 CFR states that decommissioning trust funds may be used by licensees if:

> (A) The withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in § 50.2;
>
> (B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise and;
>
> (C) The withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.

Section 50.82(a)(8)(v) of 10 CFR requires power reactor licensees that have permanently ceased operations to provide to the NRC annually, by March 31, a decommissioning financial assurance status report.

Section 50.82(a)(8)(vii) of 10 CFR provides, in part, for the licensee's annual submittal to the NRC, a report on the status of its funding for managing irradiated fuel.

Section 50.34(b)(7) of 10 CFR requires applicants to provide: The technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.

The staff applies guidance in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," Chapter 13, "Conduct of Operations," Revision 6 of Section 13.1.1, "Management and Technical Support Organization" (ADAMS Accession No. ML15005A449), for the review of the corporate-level management and technical support organization of applicants. Guidance in Revision 7 of Section 13.1.2 and 13.1.3, "Operating Organization" (ADAMS Accession No. ML15007A296), is applied for the review of the operating organization of applicants, including the structure, functions, and responsibilities of the onsite organization established to safely operate and maintain the facility.

In addressing foreign ownership, control, or domination (FOCD) issues, Section 103d of the AEA provides, in relevant part that:

> No license may be issued to…any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

The NRC's regulation in 10 CFR 50.38 is the regulatory provision that implements the FOCD provision of the AEA. Section 50.38 of 10 CFR provides, in part, that:

> [A]ny corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

The staff evaluates license transfer applications in a manner consistent with the guidance provided in the "Final Standard Review Plan on Foreign Ownership, Control, or Domination," as published in the *Federal Register* on September 28, 1999 (64 FR 52357), to determine whether the applicant is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

The staff also reviews information that relates to nuclear onsite property damage insurance requirements under 10 CFR 50.54(w) and the Price-Anderson insurance and indemnity requirements under Section 170 of the AEA and 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements."

With respect to the transfer of control of a license for an ISFSI, 10 CFR 72.50(a) states that:

> No license or any part included in a license issued under this part for an ISFSI or MRS [Monitored Retrievable Storage Installation] 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.

Finally, with respect to the requested conforming license amendment, 10 CFR 50.90 states, in part, whenever a holder of a license, including a construction permit and operating license under this part, desires to amend the license or permit, an application for an amendment must be filed with the Commission fully describing the changes desired and following as far as applicable the form prescribed for original applications. Pursuant to 10 CFR 2.1315, where administrative license amendments are necessary to reflect an approved license transfer, such amendments will be included in the order that approves the license transfer.

4.0 FINANCIAL EVALUATION

4.1 Financial Qualifications

As described in this evaluation, on September 25, 2018, pursuant to 10 CFR 50.82(a)(1)(ii), EGC certified to the NRC that it had permanently ceased operations at Oyster Creek on September 17, 2018, and that all fuel had been permanently removed from the reactor vessel and placed in the spent fuel pool. Since HDI, as the proposed licensed operator for decommissioning, will not be authorized under the facility license to operate or load fuel in the reactor pursuant to the terms of 10 CFR 50.82(a)(2), HDI will not conduct the reactor operations contemplated by the financial qualifications provisions of 10 CFR 50.33(f)(2), but rather all of its licensed activities will involve possession of radioactive material in connection with maintaining the safe condition of the plant, radiological decommissioning of the Oyster Creek site (including the ISFSI), license termination, and operational responsibilities associated with spent fuel management.

Thus, following the proposed transfer, OCEP (the proposed licensed owner) will maintain the existing Nuclear Decommissioning Trust (NDT) and will be responsible for funding all the expenses associated with radiological decommissioning of Oyster Creek and operational costs for spent fuel management. Accordingly, as described in this safety evaluation, the staff's review of the Applicants' financial qualifications and decommissioning financial assurance pursuant to 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.75, and 10 CFR 50.82(a), includes an analysis of the projected costs for decommissioning the facility and terminating the license, and managing irradiated fuel until the U.S. Department of Energy (DOE) takes title and possession of the fuel.

For a facility in decommissioning, a licensee is required to execute financial plans for spent fuel management under 10 CFR 50.54(bb) and report annually on the status of funding dedicated towards radiological decommissioning and spent fuel management under 10 CFR 50.82(a)(8)(v) to (vii).

4.2 Radiological Decommissioning

Pursuant to NRC regulations in 10 CFR 50.2, "Decommission," means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits: (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license. The existing NDT for Oyster Creek was created in compliance with 10 CFR 50.75, and the funds within the trust were collected while the facility was operating. As described below, the staff's review of decommissioning financial assurance assesses whether the Applicants have provided reasonable assurance of

obtaining the funds necessary to cover estimated costs for radiological decommissioning of Oyster Creek and its ISFSI.

Separate from this application, by letter dated September 28, 2018, the Applicants provided a revised PSDAR[4] in support of the proposed transfer (ADAMS Accession No. ML18275A116). Specifically, the revised PSDAR contained:

1. A description of the planned, accelerated decommissioning activities along with a schedule for their accomplishment;
2. A discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by previously issued environmental impact statements (EIS); and
3. A site-specific decommissioning cost estimate, including the projected irradiated fuel management costs, license termination costs, and site restoration costs.

The 2018 PSDAR, as originally submitted by EGC, reflected the current Oyster Creek decommissioning plan, to be completed by EGC within a 60-year period using the SAFSTOR method. The revised PSDAR reflects OCEP's plan to complete the immediate and accelerated decommissioning of the non-ISFSI portions of the Oyster Creek site within an 8-year period after the proposed transfer is approved. The revised PSDAR also contains the most recent decommissioning cost estimate and spent fuel management plans pursuant to 10 CFR 50.82, "Termination of License."

Under the revised PSDAR, as compared to EGC's 2018 PSDAR, the proposed change in decommissioning method from SAFSTOR to DECON results in approximately an overall 50-year acceleration of the site closure, a site-specific decommissioning cost estimate that reflects a license termination cost reduction in an amount of approximately $480 million, and a decrease in spent fuel management costs of approximately $65 million. Following site decommissioning, HDI plans to request to amend its NRC license to limit applicability of the license to that portion of the site where the ISFSI containing the spent fuel and Greater than Class C (GTCC) waste is located, with the remainder of the site being released for unrestricted use. Spent fuel storage operations will continue at the site, independent of decommissioning operations, until the transfer of the fuel to the DOE is complete.

Once the fuel and the GTCC waste are removed from the site, HDI plans to decommission the ISFSI and terminate its NRC license and release the site for unrestricted use. In accordance with the specific requirements of 10 CFR § 72.30 for ISFSI decommissioning, the cost estimate for decommissioning the ISFSI reflects: 1) the cost of HDI's decommissioning contractor performing the decommissioning activities; 2) a contingency allowance of 25%; and 3) the cost of meeting the criteria for unrestricted use. The cost summary for decommissioning the ISFSI is presented in Appendix A of the revised PSDAR.

As part of its review of the application, the staff reviewed the revised site-specific DCE for Oyster Creek included with the revised PSDAR and found that it contains the appropriate information, pursuant to NUREG-1713, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors," to perform an evaluation including:

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[4] The staff notes that the NRC does not review the PSDAR for approval; however, for the purpose of this license transfer request, the staff relied on the revised PSDAR as a reference for the Applicants' decommissioning plans.

- A description of the decommissioning cost estimating methodology
- A description of the overall decommissioning project annual expenses
- A summary decommissioning cost estimate by major activity and phase
- A schedule of the major decommissioning activities
- A summary of the radiological D&D management with support staff levels
- An estimate of the radioactive waste volume

Based on the review of the revised site-specific DCE, in accordance with NUREG-1713, and in comparison to the original EGC 2018 PSDAR and site-specific DCE, the staff finds that the Applicants' revised site-specific DCE for Oyster Creek appears reasonable.

In its application dated August 31, 2018, the Applicants provided financial projections for the duration of the Oyster Creek decommissioning project, including the amount of the decommissioning trust funds in the NDT. The application also included a cash flow analysis that assumes a NDT balance of approximately $848 million (as of January 1, 2019), as well as estimated costs for radiological decommissioning, including the Oyster Creek ISFSI[5] (~$618 million), spent fuel management, and site restoration of Oyster Creek, all to be funded using the NDT. With respect to the adequacy of funding for the radiological decommissioning of Oyster Creek and the Oyster Creek ISFSI, the staff reviewed the application, including the proposed site-specific decommissioning cost estimate for the facility, planned decommissioning activities, the most conservative opening NDT balance in 2019 ($848 million), and projected trust growth. In its analysis, the staff considered the NDT opening balance of $848 million and a 2% real-rate of return on annual balances. These considerations were included in the staff's independent cash flow analysis is contained in Attachment 1 to this safety evaluation. Based on its evaluation as shown in its cash flow analysis, the staff finds that the funds in the NDT are expected to be available and sufficient to cover the estimated costs for the radiological decommissioning of the facility (including the ISFSI).

On November 30, 2018 (ADAMS Accession No. ML18334A215), pursuant to 10 CFR 50.12, "Specific exemptions," HDI requested an exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) for Oyster Creek to allow use of a portion of the funds from the Oyster Creek NDT for the management of spent fuel and site restoration activities. Additionally, HDI requested an exemption from 10 CFR 50.75(h)(1)(iv) for all Oyster Creek NDT disbursements for spent fuel management and site restoration costs to be made without prior notice, similar to withdrawals in accordance with 10 CFR 50.82(a)(8). The staff's analysis of this regulatory exemption (ADAMS Accession No. ML19170A275) was performed separate from this safety evaluation and, on June 20, 2019, the staff approved the exemption request. This exemption is being issued simultaneously with this license transfer and will only apply to OCEP and HDI following consummation of the license transfer transaction and NRC issuance of the conforming amendment reflecting this license transfer.

In its review of the exemption, the staff concluded that reasonable assurance exists that adequate funds will be available in the NDT to complete radiological decommissioning, license

[5] According to the most recent Decommissioning Funding Status Report for Oyster Creek, dated April 1, 2019 (ADAMS Accession No. ML19091A140), the estimated cost to radiologically decommission the Oyster Creek ISFSI is approximately $5.994 million.

termination, spent fuel management, and site restoration activities within the scope of the exemption request. The staff's findings from its evaluation of the exemption were considered in its analysis of this proposed license transfer and supports the staff's conclusion that the Applicants' use of the NDT for activities associated with spent fuel management and other, non-radiological activities such as site restoration, will not negatively impact availability of funding for radiological decommissioning.

Conclusion

Based on this review, in consideration of the above analysis and the staff's independent cash flow analysis in Attachment 1 to this safety evaluation, the staff finds that OCEP and HDI have provided reasonable assurance of obtaining the funds necessary to cover estimated costs for decommissioning Oyster Creek and its ISFSI in accordance with the requirements of 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.75, and 10 CFR 50.82(a).

4.3 Spent Fuel Management

After the closing of the proposed transaction, OCEP will retain ownership and title to all spent nuclear fuel and all rights and obligations under the Standard Spent Fuel Disposal Contract (see Section 5.0, "Standard Contract for Disposal of Spent Nuclear Fuel," of this safety evaluation, for further discussion on this topic).

With regard to spent fuel removal from the reactor site, HDI indicated that its plan for spent fuel removal is consistent with the Oyster Creek SFMP previously submitted by EGC[6] and approved by staff,[7] in that fuel is expected to be removed beginning in 2034. This plan remains dependent upon the DOE's ability to remove spent fuel from the site in a timely manner. According to the Oyster Creek SFMP, assuming the DOE's generator allocation/receipt schedules are based upon the oldest fuel receiving the highest priority and that the DOE begins removing spent fuel from commercial facilities in 2025 with an annual capacity of 3,000 metric tons of uranium, spent fuel is projected to remain at the Oyster Creek site for approximately 16 years after the termination of operations. Any delay in transfer of fuel to DOE or decrease in the rate of acceptance will correspondingly prolong the transfer process and result in spent fuel remaining at the site longer than anticipated. Accordingly, in Section 3.3 of Enclosure 1 of its revised Oyster Creek PSDAR, "Oyster Creek Nuclear Power Station Revised Site-Specific Decommissioning Cost Estimate," HDI based its cost assumptions regarding fuel removal from Oyster Creek in the years 2034 through 2035. The NRC staff accepts these assumptions with regards to the final disposition of Oyster Creek spent fuel as the DOE, per the Nuclear Waste Policy Act of 1982, is authorized to ultimately enter into contracts with owners and generators of commercial spent nuclear fuel to begin taking title to (legal ownership of) spent nuclear fuel. Spent fuel storage operations will continue at the site, independent of decommissioning operations, until the transfer of the fuel to the DOE is complete.

In its license transfer application, dated August 31, 2018, the Applicants provided their funding plan for spent fuel management costs, which included using excess decommissioning trust funds for spent fuel management. The staff's review of the Applicants' funding plan for spent fuel management costs is discussed below.

[6] ADAMS Accession No. ML18141A486
[7] ADAMS Accession No. ML18226A330

Exemption to use NDT for Spent Fuel Management

The Applicants proposed to use excess decommissioning funds for spent fuel management expenses, relying on a regulatory exemption. By letter dated November 30, 2018, HDI requested an exemption from 10 CFR 50.82(a)(8)(i)(A) for Oyster Creek to allow use of a portion of the funds from the Oyster Creek NDT for the management of spent fuel and site restoration activities. As mentioned above, the staff's analysis of this regulatory exemption was performed separate from this safety evaluation and, on June 20, 2019, the staff approved the exemption request (ADAMS Accession No. ML19170A275). This exemption is being issued simultaneously with this license transfer and will only apply to OCEP and HDI following consummation of the license transfer transaction and NRC issuance of the conforming amendment reflecting this license transfer. In its review of the exemption, the staff concluded that reasonable assurance exists that adequate funds will be available in the NDT to complete radiological decommissioning, license termination, spent fuel management, and site restoration activities within the scope of this exemption request. The staff's findings from its evaluation of the exemption were considered in its analysis of this proposed license transfer and supports the staff's conclusion that the Applicants' use of the NDT for activities associated with spent fuel management and other, non-radiological activities such as site restoration, will not negatively impact availability of funding for radiological decommissioning. These findings are supported by the staff's independent cash flow analysis.

Based on its evaluation, the staff finds that the use of excess funds from the NDT for spent fuel management, provides a reasonable source of funding to cover the costs associated with spent fuel management because such use will not have a negative impact on the adequacy of funding for radiological decommissioning, as confirmed by the regulatory exemption described above.

Conclusion

The staff reviewed estimates for major spent fuel management activities and funding requirements. Based on its review, the staff concludes that the activities and associated costs of the Oyster Creek SFMP appear reasonable, and as noted above, the staff accepts the assumptions in the Oyster Creek SFMP with regard to the final disposition of Oyster Creek spent fuel by DOE. In addition, the staff does not have new information that challenges the preliminary approval of the Oyster Creek SFMP previously granted by NRC.

Pertaining to the Applicants' plan to fund spent fuel management activities from the NDT, the staff reviewed the Applicants' proposed site-specific decommissioning cost estimate for the facility, planned decommissioning activities and funding associated with those activities, and use of the NDT for spent fuel management (~$225 million) through 2035.[8] The staff assumed a conservative opening 2019 NDT balance of $848 million, based upon actual NDT balance data for Oyster Creek, and a projected NDT growth rate of 2% real rate of return on annual balances. Based on its evaluation, the staff finds that funds are expected to be available to pay for the radiological decommissioning of the facility (including the ISFSI), spent fuel management, and site restoration, as allowed by the approval of the regulatory exemption. The staff's independent cash flow analysis is contained in Attachment 1 to this safety evaluation report.

[8] According to the Oyster Creek SFMP, spent fuel is projected to be removed from the Oyster Creek site by DOE by the end of 2034.

Based on its review, and in consideration of the above analysis describing the Applicants' financial plans for managing spent fuel, the staff finds that the OCEP and HDI have reasonable assurance of obtaining the funds necessary to cover estimated costs for irradiated fuel management in accordance with 10 CFR 50.33(f) and 10 CFR 50.54(bb).

4.4 Financial Qualifications Conclusion

As described above, the staff reviewed the application in its evaluation of the Applicants' financial qualifications, funding for the decommissioning of Oyster Creek, and funding for irradiated fuel management at Oyster Creek. Based on its evaluation as described above and shown in its cash flow analysis, the staff concludes that the funds in the NDT are expected to be available and sufficient to cover the estimated costs for the radiological decommissioning of the facility (including the ISFSI). Therefore, the staff concludes that the Applicants have provided reasonable assurance of obtaining the funds necessary to cover estimated costs for decommissioning Oyster Creek in accordance with the requirements of 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.75, and 10 CFR 50.82(a).

In addition, based on its evaluation above of the Applicants' funding plans for managing spent fuel, including the regulatory exemption to use the NDT for spent fuel management, as supported by the staff's independent cash flow analysis, the staff concludes that the OCEP and HDI have reasonable assurance of obtaining the funds necessary to cover estimated costs for spent fuel management in accordance with the requirements of 10 CFR 50.33(f), and 10 CFR 50.54(bb).

Accordingly, considering the foregoing evaluation, the staff finds that OCEP and HDI are financially qualified to hold the Oyster Creek License No. DPR-16, as proposed.

5.0 STANDARD CONTRACT FOR DISPOSAL OF SPENT NUCLEAR FUEL

Upon closing, OCEP will hold title to the spent nuclear fuel at Oyster Creek and will maintain the DOE Standard Contract, including all rights and obligations under that contract. This Standard Contract, No. DE-CR01-83NE-44385 (DOE Standard Contract), was entered into by the previous owner, GPU Nuclear, Inc., then known as "GPU Nuclear Corporation," on behalf of itself and Jersey Central Power & Light Company, and the United States of America, represented by the DOE, to govern the disposal of spent nuclear fuel generated at Oyster Creek. HDI will have exclusive responsibility under the Licenses for the possession, maintenance, and decommissioning of Oyster Creek, which includes responsibility for spent fuel management and the maintenance and security of the ISFSI.

6.0 ANTITRUST REVIEW

The AEA does not require or authorize antitrust reviews of post-operating license transfer applications (*Kansas Gas and Electric Co., et al.* (Wolf Creek Generating Station, Unit 1), CLI- 99-19, 49 NRC 441 (1999)). This application postdates the issuance of the operating license for the unit under consideration in this safety evaluation, and, therefore, no antitrust review is required or authorized.

7.0 FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

Sections 103d and 104d of the AEA prohibit the NRC from issuing a license for a nuclear power plant to "any corporation or other entity if the Commission knows or has reason to

believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." The NRC's regulation, 10 CFR 50.38, contains language to implement this prohibition.

According to the application, the direct license transfer application provides that Holtec, and its subsidiaries, are not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. Holtec is privately held and controlled by its Board of Directors, all of whom are U.S. citizens. The Directors are appointed by Holtec's owners, who are trust companies organized in the State of Florida that are controlled by U.S. citizens who control the private equity funds that own holdings. Holtec Power, Nuclear Asset Management Company, LLC (NAMCo), OCEP, and HDI are all directly or indirectly controlled by Holtec, and all directors and executive committee members are U.S. citizens. CDI is jointly owned by Holtec (majority) and SNC-Lavalin, a Canadian-based company. CDI's role is defined as the Decommissioning General Contractor and is not the licensed owner or operator of Oyster Creek, nor will CDI have direct access to the Oyster Creek NDT. While there is no prohibition against foreign-owned companies performing licensed activities, the staff considered the implications, but found no reason to believe that CDI's role in the decommissioning of Oyster Creek would impact control or domination of Holtec or its subsidiaries.

Based on this information and independent open-source analysis, the staff finds that the transfer of ownership and decommissioning authority of the facility to OCEP and HDI as proposed in the application does not raise any issues related to FOCD within the meaning of the AEA and NRC regulations. In light of the above and pursuant to Sections 103d and 104d of the AEA and 10 CFR 50.38, the staff concludes that it does not know, or have reason to believe, that Holtec or its subsidiaries, including OCEP and HDI, will be owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, as a result of the license transfer.

8.0 NUCLEAR INSURANCE AND INDEMNITY

Pursuant to the requirements of the Price-Anderson Act (Section 170 of the AEA) and the NRC's implementing regulations in 10 CFR Part 140, the current indemnity agreement must be modified to reflect that, after the proposed license transfers take effect, OCEP (licensed owner) and HDI (licensed operator for decommissioning) will be the sole licensees for Oyster Creek for purposes of decommissioning the site. Consistent with NRC practice, the staff will require OCEP and HDI to provide and maintain onsite property insurance as specified in 10 CFR 50.54(w), "Conditions of licenses." OCEP and HDI are also required to provide evidence that they have obtained the appropriate amount of insurance in accordance with 10 CFR 140.11(a)(4), which will be effective concurrent with the date of the license transfers and amended indemnity agreement. Therefore, the order approving the transfer will be conditioned as follows:

> "Prior to the closing of the license transfer, OCEP and HDI shall provide the Directors of NRC's Office of Nuclear Material Safety and Safeguards (NMSS) and Office of Nuclear Reactor Regulation (NRR) satisfactory documentary evidence that they have obtained the appropriate amount of insurance required of a licensee under 10 CFR 140.11(a)(4) and 10 CFR 50.54(w) of the Commission's regulations, consistent with the exemptions issued to Oyster Creek on June 12, 2019."

Based on the above, the staff concludes that the proposed license transfer, as conditioned, satisfies the nuclear insurance and indemnity requirements of 10 CFR Part 140 and 10 CFR Part 50.

Financial Qualifications Conclusion

Based on the foregoing, and subject to the conditions described herein, the staff concludes that OCEP and HDI are financially qualified to hold the license for the Oyster Creek and the general license for the Oyster Creek ISFSI, as described in the application, and engage in the proposed maintenance and decommissioning activities associated with the Oyster Creek site. The staff has concluded, based on the considerations discussed above, that: (1) the proposed transferees are qualified to be the holders of license DPR-16 and (2) the transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

Additionally, the staff finds that the Applicants have satisfied the NRC's decommissioning funding assurance requirements and the applicable onsite and offsite insurance requirements as conditioned. Further, the staff finds that the Applicants are not owned, controlled, or dominated by a foreign entity.

9.0 TECHNICAL EVALUATION

9.1 Management and Technical Support Organization

Oyster Creek *Environmental Protection, LLC and Holtec Decommissioning International, LLC*

HDI and OCEP will be required to comply with all the requirements of the Oyster Creek current NRC licenses and applicable NRC regulations upon transfer of the licenses. As stated in the license transfer application, Holtec International is the ultimate parent company of OCEP and HDI. Holtec Power, Inc. (Holtec Power) is a direct, wholly-owned subsidiary of Holtec International. OCEP is a direct, wholly-owned subsidiary of NAMCo, which, in turn, is a direct, wholly-owned subsidiary of Holtec Power. HDI is also a direct, wholly-owned subsidiary of Holtec Power. As stated in the application, following NRC approval, OCEP will purchase Oyster Creek, including the ISFSI, pursuant to the terms of a PSA among the Applicants. OCEP will own the facility, as well as its associated assets and title to spent nuclear fuel. Upon closing the proposed transaction, HDI will assume licensed responsibility as the decommissioning operator of Oyster Creek, and OCEP will assume licensed responsibility as the owner of the site. OCEP will enter into a decommissioning operator services agreement with HDI, which will provide for HDI to act as OCEP's agent and for OCEP to pay HDI's costs for post-shutdown operations, including decommissioning, spent fuel management, and site restoration costs. HDI's licensed activities will involve possessing and disposing of radioactive material, maintaining the facility in a safe condition (including handling, storing, controlling, and protecting the spent fuel), decommissioning and decontaminating the facility, and maintaining the ISFSI until it can be decommissioned.

The Applicants further stated, in Sections II and V.C of Enclosure 1 to the August 31, 2018, application (ADAMS Accession No. ML18243A489), that HDI will contract with CDI, a company jointly formed and owned by Holtec and SNC-Lavalin, as the decommissioning general contractor, subject to HDI's direct control and oversight as the decommissioning licensed operator. HDI will become Oyster Creek's licensed operator for decommissioning, and CDI will perform day-to-day licensed activities at the site, including decommissioning activities, pursuant

to the Decommissioning General Contractor Agreement between HDI and CDI, subject to HDI's direct oversight and control as the decommissioning licensed operator.

The application further specified that CDI will subcontract with industry vendors who have "demonstrated expertise in dismantlement and decommissioning in the nuclear field." HDI and CDI will select subcontractors using industry vendor evaluation and selection vetting process, with key criteria for selection that include technical capability to perform tasks, safety record, prior record of adherence to quality, and history of adverse NRC notices, such as Notices of Violation, Confirmatory Action Letters, etc.

HDI's responsibilities as the licensed operator were described in Section V.B of the application, to include the following:

- Meeting all duties and obligations of the decommissioning operator licensee, including continuing compliance with the ISFSI Certificate of Compliance, licensing basis, and regulatory commitments and requirements;
- Possession and disposition of radioactive material;
- Maintaining the facility in a safe condition, including the storage, control, and protection of the spent fuel in the pool and on the ISFSI, until the ISFSI is decommissioned;
- Establishing and implementing processes to ensure compliance with the licenses and NRC regulations, and retaining decision-making authority for any issues related to compliance with the licenses and NRC regulations;
- Overseeing the development and submittal of licensing actions required to support ongoing decommissioning activities;
- Making necessary modification to the emergency preparedness and security plans and responses to NRC orders regarding security;
- Performing the functions necessary to fulfill the quality assurance requirements of the Oyster Creek Technical Specifications and as specified in the Oyster Creek Quality Assurance Program Manual (QAPM) in place at the time of license transfer; and
- Providing oversight of CDI, including oversight of quality assurance, safety, and security.

The application described HDI as being structured in a manner that is similar to the corporate organization that exists in many current nuclear industry utilities with a fleet of operating units. The on-site HDI position of Oyster Creek Site Vice President is planned to be filled with an Oyster Creek incumbent senior manager.

The Applicants provided a combined organizational chart of the Oyster Creek organization in Figure V-1, depicting the relationships between HDI as the decommissioning licensed operator and CDI and the decommissioning general contractor. Further, information about the roles and responsibilities of HDI and CDI senior management were provided in Sections V.B and V.C of Enclosure 1 to the August 31, 2018 letter (ADAMS Accession No. ML18243A489), respectively. The planned HDI senior management organization will be composed of Holtec personnel and will include the following:

- The HDI President and Chief Nuclear Officer (CNO) will report directly to Holtec Executive Committee. The HDI President and CNO will be responsible for overseeing the safety, operation, and decommissioning of Oyster Creek.

- The HDI Vice President for Quality Assurance and Nuclear Oversight will report to the HDI President and CNO and will be responsible for providing quality assurance oversight

for Oyster Creek, including quality assurance oversight for the movement of fuel and the transportation of radioactive waste.

- The HDI Senior Vice President and Chief Operating Officer (COO) will report to the HDI President and CNO and will be responsible for providing oversight of the decommissioning activities performed by CDI, including fuel management, security, and emergency preparedness.

- The HDI Oyster Creek Site Vice President will report to the HDI Senior Vice President and COO and will be responsible for providing day-to-day onsite leadership and direction of safe decommissioning activities at the site. In addition, the HDI Oyster Creek Site Vice President will be responsible for assuring compliance with the licenses, including the Technical Specifications, ISFSI Certificate of Compliance, and any other regulatory requirements and commitments.

- The HDI Vice President for Licensing will report to the HDI Senior Vice President and COO and will be responsible for providing licensing oversight for the decommissioning of Oyster Creek.

- The HDI Vice President for Technical Support will report to the HDI Senior Vice President and COO and will be responsible for providing technical support in the areas of health and safety, the environment, radiation protection, and decommissioning improvements at Oyster Creek.

- The CDI Oyster Creek Decommissioning General Manager will report to the HDI Oyster Creek Site Vice President and will be leading the CDI team and will maintain responsibility for overall management, performance, nuclear safety, quality assurance, and employee safety. The CDI Oyster Creek Decommissioning General Manager will also report to the CDI Vice President for Corporate Operations, who, in turn, reports directly to the CDI President. The following organizations and their respective managers will be reporting to the CDI Oyster Creek Decommissioning General Manager: Decommissioning Deputy General Manager, Regulatory Affairs Manager, Spent Fuel Manager, Radiation Protection Manager, Waste Manager, Decommissioning Projects Manager, and Project Controls Manager. In addition, the incumbent Exelon Generation Oyster Creek Decommissioning Organization personnel at the time of license transfer who accept offers of employment will be integrated into the CDI site organization. These personnel will continue to be located at Oyster Creek, and will include staff from the Plant Operations, Emergency Planning, and Security organizations, with their roles and responsibilities based largely on their pre-transfer role and responsibilities. Incumbent staffing levels will be based on the permanent shutdown and defueled status of Oyster Creek immediately prior to license transfer.

The Applicants further stated that CDI will support HDI's responsibility to maintain the facility in compliance with the licenses and NRC regulations by performing licensed activities and decommissioning safely and securely. HDI will retain ultimate decision-making authority and will provide direct governance and oversight of CDI's performance, thereby fulfilling its licensed responsibilities as the decommissioning licensed operator. HDI will be managed by Holtec senior staff to provide the requisite managerial capabilities and decision-making authority within the licensed organization, while CDI will be staffed with a combination of Holtec and Atkins personnel who have commercial nuclear experience, including experience in spent fuel handling

and decommissioning. As of the transaction closing, CDI will become the employer of Exelon Generation employees in the Oyster Creek Decommissioning Organization, except for an incumbent senior manager at Oyster Creek, who will be employed by HDI.

As stated in Sections V.C, V.D, and VIII. E of Enclosure 1 to the August 31, 2018, letter (ADAMS Accession No. ML18243A489), CDI will perform the day-to-day activities at the site to maintain compliance with the licenses and NRC regulations, subject to HDI's direct oversight and control as the licensed operator. Exelon Generation will transfer to OCEP the assets related to Oyster Creek that will be needed to maintain Oyster Creek and the site in accordance with NRC requirements and the facility licenses. These assets will include, in addition to the structures and equipment, the necessary books, records, safety and maintenance manuals, and engineering construction documents. HDI plans to adopt the current NRC-approved Exelon Generation policies, programs, procedures, and work instructions applicable to Oyster Creek, and HDI and CDI will continue to work in accordance with those documents following the post-license transfer. The existing Oyster Creek programs and procedures at the time of transfer, including the emergency plan, physical security and cyber security plans, fire protection program, radiological protection, certified fuel handler training, and quality assurance (QA) program will also be implemented by HDI and CDI, post-license transfer. Upon closing of the transaction, HDI will assume authority and responsibility for the functions necessary to fulfill the QA requirements of the Oyster Creek Technical Specifications and as specified in the Oyster Creek QAPM in place at the time of license transfer. The Oyster Creek QAPM will be added as an appendix to the Holtec QA Program and specified as applicable to the Oyster Creek site.

Strategic Partner Experience and Expertise

According to the application, HDI will draw on the experience and expertise of its parent company, Holtec, and its contractor CDI. Under HDI's direct oversight and control, CDI will perform the day-to-day licensed activities at the site, including decommissioning the plant, pursuant to a Decommissioning General Contractor Agreement between HDI and CDI. CDI will be staffed with a combination of Holtec and SNC-Lavalin personnel who have commercial nuclear experience, including experience in spent fuel handling and decommissioning. In addition to employees transferred from Holtec and SNC-Lavalin, CDI staffing will include Exelon Generation Oyster Creek Decommissioning Organization incumbent staff who, at the time of the license transfer, will be integrated into the CDI decommissioning organization, in a manner consistent with their experience and previous positions at Oyster Creek.

The experience and expertise of HDI and each of its strategic partners is briefly described below:

HDI is an indirect, wholly-owned subsidiary of Holtec. The senior management of HDI is composed of Holtec personnel. HDI is structured to serve as a fully resourced organization to directly oversee and manage licensed decommissioning operations and the dismantlement of a nuclear power plant that has ceased operation. HDI has expertise to oversee all licensed activities following reactor defueling, including the transfer of spent fuel from the spent fuel pool to the ISFSI, security, and emergency preparedness.

Holtec has extensive experience in designing, manufacturing, and installing capital equipment, as well as providing services to operating commercial power plants. Holtec also possesses in-house capabilities to design, engineer, analyze, construct, and deploy spent fuel. Holtec possesses both technical resources and experience with nuclear decommissioning, spent fuel

handling equipment, transport of nuclear fuel, and wet and dry spent fuel storage systems and components.

CDI is a company jointly owned by HDI and Kentz USA Inc., an SNC-Lavalin subsidiary. CDI is majority owned by Holtec. As stated in the application, CDI will be staffed with a combination of Holtec and SNC-Lavalin personnel who have commercial nuclear experience, including experience in spent fuel handling and decommissioning, and enhanced by the addition of incumbents from the nuclear site owner who will transition following license transfer to HDI. CDI personnel will also include Atkins personnel who have decommissioning expertise and experience.

SNC-Lavalin, one of CDI's joint owners, is an engineering and construction company. SNC-Lavalin is also the current owner and the original equipment manufacturer of CANDU reactor technology. SNC-Lavalin acquired Atkins in July 2017, which then became a wholly-owned subsidiary of SNC-Lavalin. Atkins is a design, engineering, and project management consultancy company, based in the United Kingdom (U.K.). Atkins has been involved in the nuclear clean-up, decommissioning, and environmental remediation of nuclear waste storage sites activities since the late 1980s, working with Sellafield Ltd (formerly British Nuclear Fuels Limited (BNFL)) and managing the fleet of 22 Magnox reactors, through operation and into decommissioning in the U.K. In addition, in 2016, Atkins acquired the Energy*Solutions*' Projects, Products, and Technology (PP&T) division, which was responsible for decommissioning of the Zion Nuclear Generating Station. In addition, BNFL, which is now owned by Atkins through its acquisition of Energy*Solutions* PP&T, had a significant role in the decommissioning of Big Rock Point, including the removal of the large components and reactor vessel.

Conclusion

Based on its review of the application for license transfer, the staff finds that the Applicants provided reasonable assurance that the requirements of 10 CFR 50.34(b)(7) and 10 CFR 50.80 regarding the technical qualifications of HDI to engage in the proposed activities have been met. In addition, the staff finds that HDI are technically qualified to be the holder of the license, and that the transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission. Accordingly, the staff concludes that the proposed HDI management and technical support organization will adequately support the proposed maintenance and decommissioning activities at Oyster Creek.

9.2 Onsite Organization

As stated in the application, CDI will establish a site decommissioning organization. CDI plans to employ the Exelon Generation Oyster Creek Decommissioning Organization site personnel remaining at the site at the time of the transaction closing, except for one incumbent senior manager, who will become an HDI employee as the Site Vice President in charge of the site-based organization.

The application stated that staffing levels at the time of transfer will be fully compliant with the requirements of facility licenses and NRC regulations. HDI will ensure that vacated positions previously filled by incumbent employees are backfilled with qualified personnel, subject to a determination of the need to fill the position. In all cases, the individuals will be qualified to Oyster Creek's programs and procedures.

The staffing and qualification requirements for the current operating organization at Oyster Creek were previously found to be acceptable, as approved in Amendment No. 295 to Renewed Facility Operating License No. DPR-16 and the associated defueled technical specifications, consistent with the permanent cessation of operations and permanent removal of fuel from the reactor vessel. These requirements detailed, among others, the responsibilities of a Plant Manager and a Shift Manager and stipulated that the minimum shift crew composition include at least one Shift Manager, who must be a Certified Fuel Handler, and one Non-Certified Operator. In addition, the facility staff qualifications are required to be maintained as stated in Section 6.3 of the Technical Specifications. The proposed changes to the license as described in Enclosure 1, Attachment A to the letter do not affect the staffing or qualifications requirements as approved in Amendment No. 295.

In Enclosure 3 to the letter, the Applicants provided resumes of key personnel with responsibilities of regulatory significance, including, among others, those of the HDI President and CNO, HDI Senior Vice President and COO, HDI Vice President for Quality Assurance and Nuclear Oversight, HDI Vice President for Licensing, HDI Vice President for Technical Support, and CDI Oyster Creek Decommissioning General Manager. The resumes provided information regarding the experience of individuals who will occupy the aforementioned-key positions in the areas of spent fuel management, decommissioning, nuclear safety, licensing and regulatory affairs, engineering and operations, and quality assurance.

Conclusion

Based on its evaluation, the staff concludes that the onsite organization will adequately support the proposed maintenance and decommissioning activities at Oyster Creek in accordance with 10 CFR 50.34(b)(7) that requires Applicants to provide the technical qualifications to engage in the proposed activities, and 10 CFR 50.80(c) that requires the proposed license transferee to be qualified to be the holder of the license and is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission.

9.3 Technical Qualifications Conclusions

The Applicants have described the management and technical support organization, as well as the onsite operating organization, that would be responsible for the maintenance and decommissioning of Oyster Creek after the proposed transfer of licensed authority to HDI. Based on its evaluation as described above, the staff concludes that: (1) HDI will have an acceptable management organization; (2) HDI will retain an onsite organization capable of safely conducting decommissioning activities; and (3) HDI will have the technically qualified resources and experience to support the safe maintenance and decommissioning of the Oyster Creek site after the transfer of licensed authority from Exelon to HDI. The staff also determined that the Applicants provided reasonable assurance that the relevant requirements of 10 CFR 50.34(b)(7) and 10 CFR 50.80 to engage in the proposed activities have been met. Accordingly, in light of the foregoing evaluation, the staff finds that HDI is technically qualified to hold the Oyster Creek License No. DPR-16 as proposed.

10.0 CONFORMING LICENSE AMENDMENT

10.1 Conforming Amendment

The Applicants requested a conforming amendment to License No. DPR-16 for Oyster Creek. No physical or operational changes to the facility were requested beyond those captured in the

HDI revised PSDAR. The proposed conforming amendment only reflects the proposed license transfer action. The amendment involves no safety question and is administrative in nature. Accordingly, the proposed amendment is acceptable.

10.2 State Consultation

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendment on May 16, 2019. The State official responded on May 31, 2019 (ADAMS Accession No. ML19154A058) stating:

> "The Bureau of Nuclear Engineering (BNE) reviewed the License Transfer Application (LTA) outlining the terms and conditions of the license transfer from Exelon to OCEP as the licensed owner and to HDI as the licensed operator for decommissioning. BNE staff met with the Decommissioning Team from both Exelon and Holtec to review certain aspects of the LTA and to ask clarifying questions regarding the transfer of the license. All BNE comments/concerns were discussed and satisfactorily addressed during the meeting. Additionally, the New Jersey Department of Environmental Protection (NJDEP) signed an Administrative Consent Order (ACO) agreement with Exelon outlining specific emergency preparedness requirements and commitments that have been addressed in the LTA.
>
> Based on the outcome of the meeting discussions and the ACO commitments, the NJDEP has no comments or concerns with the issuance of this Amendment."

10.3 Conforming Amendment Conclusion

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed action; (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations; and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

11.0 ENVIRONMENTAL CONSIDERATION

The subject application is for approval of a transfer of a license issued by the NRC and an associated conforming amendment required to reflect the approval of the transfer. Accordingly, the actions involved meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(21). Pursuant to 10 CFR 51.22(b), no EIS or environmental assessment need be prepared in connection with the approval of the transfer application and conforming license amendment.

12.0 PUBLIC COMMENT

The NRC's notice of consideration of the approval of transfer of license and conforming amendment was published in the in the *Federal Register* on October 19, 2018 (83 FR 53119) and included an opportunity to comment, request a hearing, and petition for leave to intervene. The comment period was re-opened on December 10, 2018 (83 FR 63544) for an additional 30-days.

Comments received in response to the *Federal Register* notices can be found at ADAMS Accession Numbers ML18302A223, ML18324A638, ML18324A776, ML18362A095,

ML19003A242, ML19004A075, ML19009A326, and ML19010A308. Two hearing requests were also received. These requests can be found at ADAMS Accession Numbers ML18306A866, ML18312A251.

On June 18, 2019, the Commission issued a Memorandum and Order (CLI-19-06) denying both hearing requests and terminating the adjudicatory proceeding (ADAMS Accession No. ML19169A106). In CLI-19-06, the Commission referred the following documents to the staff for consideration as comments on the Oyster Creek license transfer application:

1) Sierra Club New Jersey Chapter Comments and Request for Public Hearing (ADAMS Accession No. ML18306A866)

2) Comments Received from Paul Dressler representing the Concerned Citizens for Lacey Coalition, and other interested individuals (ADAMS Accession No. ML19161A084)

The themes of the questions and comments received were as follows:

1) Concerns about the responsibility for any decommissioning fund shortfalls and the financial integrity or technical qualifications of Holtec and its partners, including the impact of a potential loss of tax breaks

2) Use of the site after decommissioning

3) Concerns about continued storage of spent fuel after decommissioning, transportation of spent fuel and radioactive waste, and where spent fuel will go once removed from the site

4) Concerns with Holtec new dry cask canister design and faster transfer of fuel from the fuel pool to the dry cask canister

5) Concerns that support for the license transfer is partially based on proprietary information or incomplete cost information, and that the work will have proper oversight

6) Concern with Holtec's partners previous legal issues (bankruptcy)

7) Concerns about the reduction of emergency planning and security

8) Corrosion in the drywell

9) Concerns that an EIS must be completed before the license transfer can be completed

10) Particular concerns (ADAMS Accession Nos. ML18324A638 and ML18324A776) referencing charges against SNC-Lavalin for corruption, fraud, and bribery relating to business operations in Libya

11) Request that a public meeting be held before the NRC approves the license transfer

The staff reviewed the written public comments received during the open comment period; the comments from the State of New Jersey (ADAMS Accession No. ML19114A495); and the comments referred to the staff in CLI-19-06 (ADAMS Accession Nos. ML18306A866 and ML19161A084), and considered them in the review process. The themes of the questions and

comments that were in the scope of the NRC staff's review, such as concerns about decommissioning fund shortfalls and the financial integrity and/or the financial and technical qualifications of Holtec and its partners, to include proprietary information or incomplete cost information, are addressed below and in this safety evaluation of the license transfer application. The themes of questions and comments 2 through 4, 6 through 8, and portions of comment 5 mentioned above, were beyond the scope of the NRC staff's review of this license transfer application.

Regarding question/comment theme 1 above related to the potential loss of tax breaks, the staff found that there is no apparent nexus between the issue and the staff's review of the license transfer application. In the Oyster Creek license transfer application, the Applicants are relying on the existing decommissioning trust funds rather than internal resources to fund expenses associated with the project. Therefore, the staff determined that the potential loss of a tax break, including the resulting effect on the Applicants' financial resources, does not impact the staff's review of the Applicants' financial qualifications or decommissioning funding assurance with respect to this license transfer application.

Regarding question/comment theme 9 above, the subject application is for approval of a transfer of a license issued by the NRC and an associated conforming amendment required to reflect the approval of the transfer. Accordingly, the staff has determined that the license transfer and conforming amendment meet the eligibility criteria for the categorical exclusion set forth in 10 CFR 51.22(c)(21). Therefore, pursuant to 10 CFR 51.22(b), no EIS or environmental assessment need be prepared in connection with the approval of the transfer application and conforming license amendment.

Regarding question/theme 10 above, in accordance with 10 CFR 50.80(b)(1), the focus of the staff's review for this license transfer application was on the financial and technical qualifications of the proposed transferees, OCEP and HDI. Upon NRC approval of the license transfer and conforming amendment, OCEP would become the owner of Oyster Creek and HDI would be the decommissioning operator. In addition, as discussed in this safety evaluation, the staff has determined that the transfer of the Oyster Creek licenses and issuance of the conforming amendment will not be inimical to the common defense and security.

Regarding question/theme 11 above, the staff typically does not hold public meetings on license transfer applications, and there is no requirement to hold such a public meeting. However, the staff is required to hold public meetings on the Post Shutdown Decommissioning Activities Report and the License Termination Plan per 10 CFR 50.82(a)(4)(ii) and 10 CFR 50.82(a)(9)(iii), respectively. On July 17, 2018, the staff held a public meeting in Forked River, New Jersey to request for comments on the 2018 PSDAR, including the DCE. In accordance with 10 CFR 50.82(a)(9)(iii), the staff will schedule a public meeting upon receipt of the license termination plan.

13.0 CONCLUSION

Based on the foregoing, and subject to the conditions described herein, the staff concludes that HDI and OCEP are financially and technically qualified to hold the license for the Oyster Creek and the general license for the Oyster Creek ISFSI, as described in the application, and engage in the proposed maintenance and decommissioning activities associated with the Oyster Creek site. The staff has concluded, based on the considerations discussed above, that: (1) the proposed transferees are qualified to be the direct holders of license DPR-16 and (2) the direct

transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

Additionally, the staff finds that the Applicants have satisfied the NRC's decommissioning funding assurance requirements and the applicable onsite and offsite insurance requirements as conditioned. Further, the staff finds that the Applicants are not owned, controlled, or dominated by a foreign entity.

The proposed license transfer will be consistent with the requirements of the AEA, NRC regulations, and regulatory guidance. The transfer of the Licenses will not be inimical to the common defense and security and does not involve foreign ownership, control, or domination.

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Date: June 20, 2019

Attachment 1 – NRC's Independent Cash Flow Analysis

Cash Flow Analysis
Oyster Creek Nuclear Generating Station
Nuclear Decommissioning Trust
(millions of 2018$)

Year	BOY NDT Balance	License Termination Cost	Spent Fuel Management Cost	Site Restoration Cost	Total Costs	NDT Earnings (2% RRR)	EOY NDT Balance
2019	$848	$95	$2	$3	$100	$15	$763
2020	$763	$89	$64	$17	$170	$12	$605
2021	$605	$76	$4	$7	$87	$10	$528
2022	$528	$81	$12		$93	$9	$444
2023	$444	$121	$16		$137	$6	$313
2024	$313	$134	$3	$13	$150	$3	$166
2025	$166	$10	$9	$1	$20	$3	$149
2026	$149		$8		$8	$3	$144
2027	$144		$8		$8	$3	$139
2028	$139		$8		$8	$3	$133
2029	$133		$8		$8	$3	$128
2030	$128		$8		$8	$2	$122
2031	$122		$8		$8	$2	$117
2032	$117		$8		$8	$2	$111
2033	$111	$9	$27		$36	$1	$76
2034	$76	$2	$27		$29	$1	$48
2035	$48	$1	$8	$1	$10	$1	$39
	Totals	$618	$228	$42	$888		

Notes:

1. The 2019 beginning of year (BOY) NDT balance reflects the fund value post-closure of asset sale and includes deductions for estimated Exelon pre-closure costs. The 2019 costs include HDI estimated pre- and post-closure costs.
2. Assumes no credit for DOE reimbursements.
3. ISFSI decommissioning costs ($3.9 million) included in above cash flow analysis.