

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 12, 2021

Andrea L. Sterdis
Vice President Regulatory
and Environmental Affairs
Holtec Decommissioning
International, LLC
Krishna P. Singh Technology Campus
1 Holtec Blvd.
Camden, NJ 08104

SUBJECT: HOLTEC DECOMMISSIONING INTERNATIONAL – REVIEW AND

ACCEPTANCE OF THE HOLTEC DECOMMISSIONING INTERNATIONAL

FLEET DECOMMISSIONING QUALITY ASSURANCE PROGRAM

(EPID L-2020-DP3-0000)

Dear Ms. Sterdis:

By letter dated August 27, 2020 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML20240A342), Holtec Decommissioning International, LLC (HDI) submitted an application seeking U.S. Nuclear Regulatory Commission (NRC) review and approval of the Decommissioning Quality Assurance Program (DQAP) for the HDI fleet (HDI Fleet DQAP), in accordance with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) paragraph 50.54(a)(4). HDI indicated that (upon approval) the proposed HDI Fleet DQAP would provide for transition of the individual site-specific DQAPs currently in use at the Oyster Creek Nuclear Generating Station (Oyster Creek) and Pilgrim Nuclear Power Station (Pilgrim) to a fleet-based DQAP.

In addition, HDI indicated in its application that it intends to adopt the HDI Fleet DQAP (upon approval) for other HDI decommissioning sites (as they are acquired by HDI) and after site-specific Quality Assurance (QA) requirements are evaluated in accordance 10 CFR 50.54(a)(3). HDI conducted a comparison of the HDI Fleet DQAP to the current Oyster Creek and Pilgrim DQAPs and concluded that the proposed changes resulted in a reduction in commitment from the DQAPs currently in use at the Oyster Creek and Pilgrim Stations, and therefore requires NRC approval prior to implementation.

The NRC staff completed its review of your request and determined that the HDI Fleet DQAP, Revision A, as described, is in conformance with the applicable portions of Appendix B to 10 CFR Part 50. The NRC staff concludes that the HDI Fleet DQAP, Revision A, follows the NRC guidance identified in the enclosed NRC safety evaluation, conforms to guidance contained in NUREG-1536, Revision 1, "Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility," and NUREG-1757, Volume 1, Revision 2, "Decommissioning Process for Material Licensees," and complies with Appendix B to 10 CFR Part 50, Subpart H of 10 CFR Part 71, and Subpart G of 10 CFR Part 72 requirements for the QA program applicable to the licenses and is, therefore, acceptable.

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Approval of this HDI Fleet DQAP, Revision A, applicable to Oyster Creek and Pilgrim, is effective the date of this letter and shall be implemented within 60 days of the effective date.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>.

If you have any questions, please contact us at (301) 415-3808 or via e-mail at <u>zahira.cruzperez@nrc.gov</u> (Oyster Creek), and (301) 415-6822 or via e-mail at <u>amy.snyder@nrc.gov</u> (Pilgrim).

Sincerely,

Zahira Cruz, Project Manager Reactor Decommissioning Branch

Joh & a R

Division of Decommissioning, Uranium Recovery and Waste Programs

Office of Nuclear Material Safety

and Safeguards

Amy Snyder, Senior Project Manager Reactor Decommissioning Branch Division of Decommissioning, Uranium Recovery and Waste Programs Office of Nuclear Material Safety and Safeguards

Docket Nos. 50-219, 50-293, 72-15, 72-1044

#### Enclosure:

1. Safety Evaluation

cc: Oyster Creek Listserv Pilgrim Listserv

Pierre Paul Oneid: <a href="mailto:p.oneid@holtec.com">p.oneid@holtec.com</a>
Pamela B. Cowan: <a href="mailto:p.cowan@holtec.com">P.Cowan@holtec.com</a>

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SUBJECT: HOLTEC DECOMMISSIONING INTERNATIONAL – REVIEW AND

ACCEPTANCE OF THE HOLTEC DECOMMISSIONING INTERNATIONAL

FLEET DECOMMISSIONING QUALITY ASSURANCE PROGRAM

(EPID L-2020-DP3-0000) DATED January 12, 2021

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ADAMS Accession No.: ML21011A106 \*via email

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# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

### FOR APPROVAL REQUEST OF HOLTEC DECOMMISSIONING INTERNATIONAL FLEET

#### DECOMMISSIONING QUALITY ASSURANCE PROGRAM, REVISION A

# OYSTER CREEK NUCLEAR GENERATING STATION

PILGRIM NUCLEAR POWER STATION

HOLTEC DECOMMISSIONING INTERNATIONAL, LLC

(DOCKET NOS. 50-219, 72-15, 50-293, 72-1044)

### 1.0 INTRODUCTION

By letter dated August 27, 2020 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML20240A342), Holtec Decommissioning International (HDI) submitted for the U.S. Nuclear Regulatory Commission (NRC) staff's review, a proposed Revision A of the Decommissioning Quality Assurance Program (DQAP) for the HDI fleet, in accordance with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(a)(4). The proposed HDI DQAP provides for transition of the individual site specific DQAPs currently in use at the Oyster Creek Nuclear Generating Station (Oyster Creek) and Pilgrim Nuclear Power Station (Pilgrim) to a fleet-based DQAP. In addition, the proposed HDI DQAP is intended to be adopted by other HDI decommissioning sites after site specific quality assurance (QA) requirements are evaluated in accordance with 10 CFR 50.54(a)(3).

The NRC requested additional information by email dated October 22, 2020 (ADAMS Accession No. ML20297A236). HDI submitted its response dated November 30, 2020 (ADAMS Accession No. ML20335A324). HDI also submitted a clarification email dated December 9, 2020 (ADAMS Accession No. ML20352A193).

The HDI DQAP provides a top-level overview of the QA program controls applied to quality related items and activities at Oyster Creek and Pilgrim during the decommissioning phase of the plant life. The HDI DQAP is based on the applicable portions of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities"; 10 CFR Part 71, "Packaging and Transportation of Radioactive Material," Subpart H, "Quality Assurance"; and 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste," Subpart G, "Quality Assurance."

## 2.0 REGULATORY BASIS

The NRC's regulatory requirements related to QA programs are set forth in Appendix B to 10 CFR Part 50, 10 CFR 50.34(b)(6)(ii), and 10 CFR 50.54(a). In addition, the NRC's regulatory requirements related to QA programs for the independent storage of spent nuclear fuel and packaging and transportation of radioactive material are addressed in 10 CFR Part 71, Subpart H, and 10 CFR Part 72, Subpart G.

Appendix B establishes the requirements for the design, fabrication, construction, and testing of structures, systems and components (SSCs) for the facility. The pertinent requirements of Appendix B apply to all activities affecting the safety-related functions of those SSCs and include designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying.

The regulations in 10 CFR 50.34, "Content of applications; technical information," require that every applicant for an operating license include information in its Final Safety Analysis Report (FSAR) on the managerial and administrative controls to be used to ensure safe operation. The information on the controls shall also include a discussion on how the applicable requirements of Appendix B will be satisfied.

The regulations in 1) 10 CFR 50.54 require each power plant subject to the requirements of Appendix B to implement a QA program; and 2) 10 CFR 50.54(a)(4) require licensees to submit to the NRC, changes to their QA program that reduce commitments.

The regulations in 10 CFR Part 71, Subpart H, establishes the QA requirements applying to design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, and modification of components of packaging that are important to safety.

The regulations in 10 CFR Part 72, Subpart G, establishes the QA requirements that apply to design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, modification of SSCs, and decommissioning that are important to safety.

# 3.0 TECHNICAL EVALUATION

The request for review and approval of the proposed fleet-based HDI DQAP, considered a reduction in commitment, was submitted by letter dated August 27, 2020, in accordance with the provisions of 10 CFR 50.54(a)(4). The letter included Revision A of the HDI DQAP (provided in Enclosure 1 thereto), as well as a comparison of the HDI DQAP (provided in Enclosure 2 thereto) to the Oyster Creek and Pilgrim DQAPs (provided in Enclosures 3 and 4 thereto).

In evaluating the adequacy of the HDI DQAP, the NRC staff used the guidance contained in NUREG-1536, Revision 1, "Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility," and NUREG-1757, Volume 1, Revision 2, "Decommissioning Process for Material Licensees."

## 3.1 Organization

The HDI DQAP describes and defines the responsibility and authority for planning, establishing, and implementing an effective QA program. The HDI DQAP provides a description of an organizational structure, functional responsibilities, levels of authority, and interfaces for establishing, executing, and verifying HDI DQAP implementation.

The HDI DQAP eliminates the on-site QA Manager position and its associated responsibilities as described in the Station Management Section of the Pilgrim DQAP. This is considered a reduction in commitment since there will no longer be a requirement for a QA Manager permanently stationed at the Pilgrim site. In response to Request for Additional Information (RAI) Question 1(a), HDI clarified that the HDI QA organization is a corporate function under the direction of the HDI Vice President of QA. There are currently no QA personnel permanently located at any of the HDI sites. If an HDI site were to have QA personnel, they would report directly to the HDI Vice President of QA. The function of QA to audit and to ensure compliance with those areas required by the regulations will be provided by individuals at the site or at the corporate organization reporting to the corporate organization for that function. The auditing function will be on site for the necessary aspects of the review. This will ensure that regulatory compliance is being audited in an independent manner. This maintains the assurance of an independent review of compliance.

In response to RAI Question 1(b), HDI clarified that the overall responsibilities that a site QA Manager would have, such as establishing, controlling, and verifying the implementation and adequacy of the QA program, to ensure that the QA program is still in compliance with the requirement delineated in Appendix B to 10 CFR Part 50, are the responsibility of the HDI Vice President of QA.

In response to RAI Question 1(c), HDI clarified that all employees and contractors at HDI decommissioning facilities, including Oyster Creek and Pilgrim, have the authority and responsibility to escalate matters directly to the highest-level nuclear executive of HDI, if necessary. The HDI Senior Vice President and Chief Operating Officer (HDI COO) is the senior executive responsible for the decommissioning facilities maintained by HDI. In addition, each HDI decommissioning facility also has an HDI Site Vice President located on site. The HDI Site Vice President is responsible for providing day-to-day on-site leadership and direction to maintain the facility in compliance with all regulations, licenses, and permits including the site QA program. In this role, the HDI Site Vice President has the responsibility and expectation to escalate matters to the HDI COO.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.1, "Quality Assurance Organization," and NUREG-1757, Volume 1, Revision 2, Section 17.6.1, "Organization," for the scope of activities related to spent fuel and decommissioning.

### 3.2 Quality Assurance Program

The HDI DQAP provides controls over activities affecting quality to an extent consistent with its importance to ensure safety and compliance. The HDI DQAP applies to regulatory programs and SSCs designated as important-to-safety. The HDI DQAP establishes clear program controls, authority, reviews and personnel training and qualification requirements.

In response to RAI Question 2, HDI clarified that disputes arising between departments or organizations on any QA matter will be resolved by the HDI Site Vice President in consultation with the corporate senior QA position, currently the Vice President of QA, who will have final authority in such matters.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.2, "Quality Assurance Program," and NUREG-1757, Volume 1, Revision 2, Section 17.6.2, "Quality Assurance Program," for the scope of activities related to spent fuel and decommissioning.

# 3.3 <u>Design Control</u>

The HDI DQAP includes design control provisions to control design inputs, performance, interfaces, verification, changes, and records. The design control provisions include requirements for verifying the acceptability of design activities and documents, consistent with their effects on safety for SSCs that have important-to-safety functions.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.3, "Design Control," for the scope of activities related to spent fuel.

## 3.4 Procurement Document Control

The HDI DQAP establishes measures for the preparation, review, and approval of procurement documents to assure adequate quality controls for materials, equipment and services for important-to-safety activities and SSCs. The HDI DQAP provides controls to assure procurement documents contain appropriate technical and quality requirements for items and services. Changes to procurement documentation are subject to the original documentation controls.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.4, "Procurement Document Control," for the scope of activities related to spent fuel.

# 3.5 <u>Instructions, Procedures and Drawings</u>

The HDI DQAP establishes measures to assure that quality activities are prescribed and performed in accordance with documented instructions, procedures, and drawings. Documented and approved instructions, procedures, and drawings are required to accomplish important-to-safety work.

In response to RAI Question 3, HDI clarified that documents comprised of instructions, procedures, specifications, and drawings prepared by outside contractors for the performance of site activities are reviewed and approved by the responsible functional area manager or designated knowledgeable representative. The HDI Site Vice President has the overall responsibility for assuring documents prepared by outside contractors are reviewed and approved as applicable.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.5, "Instructions, Procedures, and Drawings," for the scope of activities related to spent fuel.

#### 3.6 <u>Document Control</u>

The HDI DQAP establishes measures to control the issuance of instructions, procedures, and drawings which prescribe activities affecting quality within the scope of the HDI DQAP. The HDI DQAP provides provisions to control documentation preparation, modification, review, approval, issuance, and distribution to ensure correct and accurate documents are being employed.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.6, "Document Control," and NUREG-1757, Volume 1, Revision 2, Section 17.6.3, "Document Control," for the scope of activities related to spent fuel and decommissioning.

# 3.7 Control of Purchased Material, Equipment, and Services

The HDI DQAP establishes measures for the control of purchased material, equipment and services to assure they conform to procurement documents. The HDI DQAP provides controls to evaluate prospective suppliers and to ensure they can meet specified technical and quality requirements. In addition, the program requires that suppliers be periodically audited and evaluated to ensure that qualified suppliers continue to provide acceptable products and services. The HDI DQAP requires that only qualified personnel perform audits, source inspections and surveys.

Section 7.2 of the HDI DQAP states, "Verification that a vendor can meet the specified technical and quality requirements shall be documented. HDI maintained an Approved Vendor List (AVL) for those vendors qualified to perform safety significant work. The qualification requirements for vendors on the AVL are described in control procedures. Vendor qualification processes use a graded approach based on the qualification level of the vendor."

In response to RAI Question 4 and the follow up clarification email, HDI clarified that the graded approach is only applicable to items and services related to moving fuel that fall under 10 CFR Part 72 Subpart G. A graded approach is only used for lower level, non safety-related activities in accordance with the classification under NUREG-6407, "Classification of Transportation Packaging and Dry Spent Fuel Storage System Components According to Importance to Safety."

The HDI DQAP provides measures for acceptance actions, such as source evaluation and selection, review of objective evidence of quality furnished by suppliers, source inspection, audits, and receipt inspections. The HDI DQAP provides provisions for the use of accreditation in lieu of commercial grade surveys for procurement of laboratory calibration and test services in accordance with the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC)-17025:2017 (ADAMS Accession No. ML20325A192).

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.7, "Control of Purchased Material, Equipment, and Services," for the scope of activities related to spent fuel.

# 3.8 Identification and Control of Materials, Parts, and Components

The HDI DQAP establishes the necessary measures for the identification and control of materials, parts, and components, including partially fabricated assemblies to ensure the correct items are installed. Identification is maintained on the items or in documents traceable to the

items. Items with a limited shelf life are controlled to prevent inadvertent use after shell life expiration. The HDI DQAP includes provisions for the maintenance or replacements of markings due to aging and handling.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.8, "Identification and Control of Materials, Parts, and Components," for the scope of activities related to spent fuel.

#### 3.9 Control of Special Processes

The HDI DQAP establishes provisions to ensure that special processes that require interim quality process controls, such as welding, heat treating, chemical, cleaning, and nondestructive examination, are controlled and accomplished by qualified personnel using approved written procedures in accordance with applicable codes, standards, specifications, criteria and other special requirements.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.9, "Control of Special Processes," for the scope of activities related to spent fuel.

### 3.10 Inspection

The HDI DQAP establishes measures for inspection of important-to-safety activities to verify conformance with specified requirements and meet the acceptance criteria established in applicable design documentation.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.10, "Licensee Inspection," for the scope of activities related to spent fuel.

#### 3.11 Test Control

The HDI DQAP establishes measures for a test program to demonstrate that important-to-safety SSCs will perform satisfactorily in service in accordance with decommissioning technical specifications, license conditions and design documentation. The HDI DQAP establishes the necessary measures and governing provisions to demonstrate that items subject to these provisions will perform satisfactorily in service.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.11, "Test Control," for the scope of activities related to spent fuel.

#### 3.12 Control of Measuring and Test Equipment

The HDI DQAP establishes measures to control the calibration, maintenance, handling, storage and use of measuring and test equipment (M&TE), including installed plant instrumentation that provide information important-to-safety. The HDI DQAP establishes provisions for organizational responsibilities to ensure an effective calibration program and to provide governance and oversight of the M&TE program.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.12, "Control of Measuring and Test Equipment," and NUREG-1757,

Volume 1, Revision 2, Section 17.6.4, "Control of Measuring and Test Equipment," for the scope of activities related to spent fuel and decommissioning.

# 3.13 Handling, Storage, and Shipping

The HDI DQAP establishes the necessary measures to control the handling, storage, packaging, shipping, cleaning, and preservation of items to prevent damage or deterioration. The HDI DQAP establishes provisions to control situations in which special requirements may be needed to ensure important-to-safety SSCs will be handled, stored and shipped adequately.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.13, "Handling, Storage, and Shipping Control," for the scope of activities related to spent fuel.

# 3.14 <u>Inspection, Test, and Operating Status</u>

The HDI DQAP establishes and implements measures to identify the inspection, test and operating status of items and components important-to-safety in order to prevent the unintentional bypass of required inspections or tests and to avoid inadvertent operation. The HDI DQAP establishes provisions for the control of temporary design changes to ensure appropriate installation and removal, adequate verifications, and status tracking.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.14, "Inspection, Test, and Operating Status," for the scope of activities related to spent fuel.

# 3.15 Nonconforming Materials, Parts, or Components

The HDI DQAP establishes the necessary measures to identify, segregate and control items, and to prevent inadvertent installation or use of nonconforming items. Nonconformances are evaluated or resolved prior to relying on the item to perform the item's important-to-safety function. The HDI DQAP establishes provisions for the documentation of nonconformances corrective actions and reporting of significant trends in nonconformances.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.15, "Nonconforming Materials, Parts, or Components," for the scope of activities related to spent fuel.

## 3.16 Corrective Action

The HDI DQAP establishes the necessary measures to promptly identify, control, document, classify, and correct conditions adverse to quality. The HDI DQAP requires personnel to identify known conditions adverse to quality. Reports of conditions adverse to quality are analyzed to identify trends. Significant conditions adverse to quality are documented and reported to responsible management.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.16, "Corrective Action," and NUREG-1757, Volume 1, Revision 2, Section 17.6.5, "Corrective Action," for the scope of activities related to spent fuel and decommissioning.

#### 3.17 Quality Assurance Records

The HDI DQAP establishes the necessary measures to ensure that sufficient records of items and activities affecting quality are identified, generated, collected, stored, maintained, and retained. The HDI DQAP establishes provisions to ensure retrievable records show objective evidence of compliance with regulations and implementing procedures. Concerning the use of electronic records storage and management, the HDI DQAP complies with the NRC guidance given in Regulatory Issue Summary (RIS) 2000-18, "Guidance on Managing Quality Assurance Records in Electronic Media," dated October 23, 2000.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.17, "Quality Assurance Records," and NUREG-1757, Volume 1, Revision 2, Section 17.6.6, "Quality Assurance Records," for the scope of activities related to spent fuel and decommissioning.

#### 3.18 Audits

The HDI DQAP establishes the necessary measures to implement audits to verify compliance and implementation. The HDI DQAP establishes an internal audit program frequency commensurate with the status and importance of the activity without exceeding a 24-month period unless approved for extension as delineated by the HDI DQAP. The HDI DQAP provides provisions for audit schedule, preparation, personnel selection, personnel qualification, performance, reporting, follow-up, and records management. The internal audit schedule is maintained, reviewed and revised at least annually to ensure quality programs meet regulations and standards. External audits of suppliers are conducted to ensure adequate implementation of its suppliers' QA programs at a frequency that does not exceed once every 36 months unless an extension is approved in accordance with the HDI DQAP requirements. The HDI DQAP ensures audit results are reviewed and approved in accordance with approved procedures.

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14.5.18, "Audits," and NUREG-1757, Volume 1, Revision 2, Section 17.6.7, "Audits and Surveillance," for the scope of activities related to spent fuel and decommissioning.

# 3.19 Regulatory Commitments

In Section 2.2 of the HDI DQAP, the licensee commits to comply with the following regulatory requirements:

- Appendix B to 10 CFR Part 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Processing Plants;"
- 10 CFR Part 71, Subpart H, "Quality Assurance" for Packaging and Transportation of Radioactive Material;
- 10 CFR Part 72, Subpart G, "Quality Assurance" for Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste:
- NUREG/CR-6407, "Classification of Transportation Packaging and Dry Spent Fuel Storage System Components According to Importance to Safety."

The NRC staff determined that the HDI DQAP follows the applicable guidance in NUREG-1536, Revision 1, Section 14, "Quality Assurance Evaluation," and NUREG-1757, Volume 1, Revision 2, Section 17.6, "Decommissioning Plan: Quality Assurance Program Overview," for the scope of activities related to decommissioning and spent fuel.

# 4.0 CONCLUSION

The NRC staff used the acceptance criteria of NUREG-1536, Revision 1, Section 14 and NUREG-1757, Volume 1, Revision 2, Section 17.6 as the basis for evaluating the acceptability of the proposed HDI DQAP, Revision A, in conformance with the applicable portions of Appendix B to 10 CFR Part 50, Subpart H of 10 CFR Part 71, and Subpart G of 10 CFR Part 72. The program description of the proposed HDI DQAP, Revision A, adequately describes the provisions to meet the aforementioned regulatory requirements. The NRC staff concludes that the proposed HDI DQAP, Revision A, follows the NRC guidance contained within, and conforms to the format of NUREG-1536, Revision 1, Section 14 and NUREG-1757, Volume 1, Revision 2, Section 17.6. The proposed HDI DQAP, Revision A, complies with Appendix B to 10 CFR Part 50, Subpart H of 10 CFR Part 71, and Subpart G of CFR Part 72 requirements for the QA program and is, therefore, acceptable.

# 5.0 REFERENCES

- 1. HDI letter to the U.S. NRC, "Request for Approval of HDI Fleet Decommissioning Quality Assurance Program, Revision 0," NRC Docket Nos. 50-219 and 72-15, 50-293 and 72-1044, August 27, 2020 (ADAMS Accession No. ML20240A342).
- 2. U.S. NRC letter to HDI, "Request for Additional Information Related to Request for Approval of HDI Fleet Decommissioning Quality Assurance Program, Revision 0, October 22, 2020 (ADAMS Accession No. ML20297A236).
- 3. HDI letter to the U.S. NRC, "Response to NRC Requests for Additional Information, November 30, 2020 (ADAMS Accession No. ML20335A324).
- 4. HDI email to the U.S. NRC, December 9, 2020 (ADAMS Accession No. ML20352A193).
- 5. NUREG-0800, "Standard Review Plant for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," Section 17.3, "Quality Assurance Program Description," August 1990.
- 6. NUREG-1536, Revision 1, "Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility," July 2010.
- 7. NUREG-1757, Volume 1, Revision 2, "Decommissioning Process for Materials Licensees," September 2006.
- 8. NUREG/CR-6407, "Classification of Transportation Packaging and Dry Spent Fuel Storage System Components According to Importance to Safety," February 1996.
- 9. Regulatory Issue Summary RIS-2000-18, "Guidance on Managing Quality Assurance Records in Electronic Media," October 23, 2000.

10. U.S. NRC letter to Nuclear Energy Institute (NEI), "Update to the Provision Recognition of the International Standard Organization/International Electrotechnical Commission Standard No. 17025, "General Requirements for the Competence of Testing and Calibration Laboratories," 2017 Edition," November 20, 2020 (ADAMS Accession No. ML20325A192).

Principal Contributor: Yiu Law

Date: January 4, 2021