

From: [Guzman, Richard](#)
To: [Andrea Sterdis](#)
Cc: [Matthew Johnson](#); [Danna, James](#)
Subject: Indian Point Unit Nos. 1, 2 and 3 - NRC Assessment of HDI Fleet Decommissioning Quality Assurance Program and IPEC Quality Assurance Program Manual [EPID L-2021-LLQ-0000]
Date: Friday, July 16, 2021 4:29:47 PM

Andrea,

The NRC staff has completed its review of the Indian Point QAPM, Revision 3 against the NRC-approved HDI Fleet Decommissioning Quality Assurance Program (DQAP) to assess the applicability of the Request for Additional Information (RAI) issued on May 18, 2021 (ADAMS Accession No. ML20190A163). Based on its evaluation, the NRC staff has determined that the RAI is no longer necessary because the HDI DQAP addresses the reduction in commitments in the Indian Point QAPM. Therefore, HDI's response to the RAIs dated May 18, 2021, is not required.

The NRC staff's review is documented below with the evaluation and assessment sections to the original RAIs sent to Entergy. All review activities under Enterprise Project Identification (EPID) L-2021-LLQ-0000 will be closed as of July 16, 2021. This e-mail communication will be added to ADAMS to serve as the official closeout documentation for the subject review. Please contact me if you have any questions on this matter.



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NRC ASSESSMENT OF THE NRC-APPROVED HOLTEC DECOMMISSIONING
INTERNATIONAL
FLEET DECOMMISSIONING QUALITY ASSURANCE PROGRAM, REVISION 0, AND
THE ENTERGY INDIAN POINT ENERGY CENTER QUALITY ASSURANCE PROGRAM
MANUAL
INDIAN POINT NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3
DOCKET NOS. 50-3, 50-247, AND 50-286
EPID L-2021-LLQ-0000

By letter dated April 22, 2020, Entergy Nuclear Operations, Inc. (Entergy, the licensee) submitted the Indian Point Energy Center (IPEC) Quality Assurance Program Manual

(QAPM), Revision 0 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML20113E817) as a conversion from an Entergy Fleet QAPM to a site-specific IPEC QAPM. Subsequent revisions of the IPEC QAPM were submitted by letters dated July 7, 2020 (Revision 1), November 9, 2020 (Revision 2), and April 1, 2021 (Revision 3) (ADAMS Accession Nos. ML20190A163, ML20314A128, and ML21091A147, respectively). As stated by the licensee, the IPEC QAPM, Revision 0 was issued on April 03, 2020 in preparation for the decommissioning of IPEC. To support the implementation of ongoing quality assurance activities and the transition to a decommissioning facility, the licensee adopted the Entergy (fleet) QAPM under the guidance provided in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(a)(3) and established a site-specific QAPM for IPEC using the Entergy QAPM as the basis. The licensee further stated that the changes to the IPEC-specific QAPM were assessed using the guidance provided in 10 CFR 50.54(a)(3) and determined that the changes did not constitute a reduction in commitments to the previously approved quality assurance program.

The regulation at 10 CFR 50.54(a)(3), states in part, that a licensee may make a change to a previously accepted quality assurance program description included or referenced in the Safety Analysis Report without prior NRC approval, provided the change does not reduce the commitments in the program description as accepted by the NRC. The NRC staff notes, however, that it has not evaluated the IPEC QAPM; therefore, the proposed application of 10 CFR 50.54(a)(3) for the stated conversion to the site-specific QAPM and subsequent revisions is not appropriate since it is not based on a previously approved quality assurance program description. The NRC staff is reviewing the IPEC QAPM, Revision 3, and has determined that additional information is needed to complete its review, as described in the request for additional information (RAI) shown below.

On May 18, 2021 (ADAMS Accession No. ML20190A163), the NRC staff issued a Request for Additional Information (RAI) to Entergy regarding the IPEC QAPM, Revision 3. On May 28, 2021, Holtec Decommissioning International (HDI) assumed ownership of IPEC. By letter dated January 12, 2021, the NRC approved the HDI Fleet Decommissioning Quality Assurance Program (DQAP) (ADAMS Accession No. ML21011A106). With the change of ownership of IPEC, the NRC staff reviewed the IPEC QAPM, Revision 3 against the NRC approved HDI DQAP to assess whether the May 18, 2021 RAIs would be needed. Based on its review, the NRC staff has determined that the May 18, 2021, RAI is not needed because the HDI DQAP addresses the reduction in commitments in the IPEC QAPM. The NRC staff's review is documented below with the evaluation and assessment sections to the original RAIs sent to Entergy.

Regulatory Basis:

Criterion II, "Quality Assurance Program," of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," states, in part, that "The quality assurance program shall provide control over activities affecting the quality of the identified structures, systems, and components, to an extent consistent with their importance to safety. Activities affecting quality shall be accomplished under suitably controlled conditions."

The IPEC QAPM, Revision 3 was provided as Enclosure 2 to the letter dated April 1, 2021, "Annual Report for Entergy Quality Assurance Program Manual and Indian Point Energy

Center Quality Assurance Program changes under 10 CFR 50.54(a)(3), 10 CFR 71.106, and 10 CFR 72.140(d) Notification of Application of Approved Appendix B to 10 CFR 72 subpart G.” This enclosure described the changes to the Entergy IPEC QAPM since the IPEC site-specific QAPM, Revision 0 was issued on April 3, 2020. A synopsis of IPEC QAPM Revision 1 was provided as follows:

This change to the IPEC QAPM Revision 0 was made upon the shutdown of IPEC Unit 2 and certification of permanent cessation of operations and permanent defueling of IPEC Unit 2 under 10 CFR 50.82(a)(1). This change provided conditional based exceptions that may be implemented for a unit that has permanently ceased power operations and has docketed a certification of permanent cessation of operations and permanent defueling under 10 CFR 50.82(a)(1) and entered decommissioning. The conditional based exceptions included within this revision to the IPEC QAPM are considered reductions in commitments to the previously approved QAPM, but can be implemented without prior NRC approval for the following reasons:

- The first conditional based exception that is considered a reduction in commitments to the previously approved QAPM is with Table 1 Sections A.1 and C.14 which adds a discussion regarding the position of Certified Fuel Handler (CFH) which becomes equivalent to the position of Senior Reactor Operator once a unit has a certification of permanent cessation of operations under 10 CFR 50.82(a)(1). This exception can only be implemented if a unit has permanently ceased power operations and has Certified under 10 CFR 50.82(a)(1). This conditional based exception relies on an NRC issued License Amendment (LA) to the Administrative Technical Specifications and the associated safety evaluation report (SER) for the specific unit and the submittal of the CFH Training Program to the NRC for review and approval. This would be considered a corresponding change to implement the specific unit’s license amendment request (LAR) with the associated SER for a unit that has permanently ceased power operations and has docketed a certification of permanent cessation of operations and permanent defueling under 10 CFR 50.82(a)(1) and entered decommissioning. This LAR was submitted to the NRC by Entergy IPEC via outgoing letter NL-19-013 (ADAMS Accession No. ML19105B236) and provided requested changes to the Unit 2 and Unit 3 Administrative Technical Specifications.
- The second conditional based exception included in this change and is considered a reduction in commitments to the previously approved QAPM provides an allowance to credit alternative experience to determine the qualifications for the position of CFH and operators for a unit that has permanently ceased power operations and has certified under 10 CFR 50.82(a)(1). This change was previously approved by the NRC for Vermont Yankee [Reference Letter to Vermont Yankee from the NRC, dated June 16, 2016 (ADAMS Accession Nos. ML16165A466 and ML16165A467), which included an associated SER] based on their docketing of the certification of permanent cessation of operations and permanent defueling under 10 CFR 50.82(a)(1). This is a consistent

approval basis to the condition that IPEC Units 2 and 3 will achieve when the same milestone is met. This allows the conditional based exception to be included in the QAPM and implemented based on the associated Vermont Yankee SER without requiring prior NRC approval.

RAI-1

(NRC RAI-1 Issued May 18, 2021): IPEC describes the two conditions above as “reductions in commitments.” The regulation at 10 CFR 50.54(a)(4) would then apply which states in part, “Changes to the quality assurance program description that do reduce the commitments must be submitted to the NRC and receive NRC approval prior to implementation.”

The NRC staff determined that the Entergy IPEC QAPM, Revision 3 should be reviewed because of changing conditions due to decommissioning and potential reduction in commitments not previously reviewed and accepted.

In light of the above, please address the reduction in commitments to the IPEC QAPM that must be submitted to the NRC for approval prior to implementation under 10 CFR 50.54(a)(4).

NRC Staff Evaluation: The HDI DQAP does not directly address replacement of the Senior Reactor Operator (SRO) with the Certified Fuel Handler (CFH) once a unit has a certification of permanent cessation of operations under 10 CFR 50.82(a)(1), but paragraph 2.7.2 of the HDI DQAP, “Personnel Training and Qualifications,” satisfies the guidance of NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition,” Section 17.3, “Quality Assurance Program Description,” Paragraph A.5, “Personnel Training and Qualifications.”

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” in evaluating the adequacy of the HDI DQAP. These two documents contain the regulatory guidance of NUREG-0800, Section 17.3, Paragraph A.5, “Personnel Training and Qualifications.”

NRC Staff Assessment: Additional information is not required because the HDI DQAP satisfies the regulatory guidance of NUREG-0800, Section 17.3, and has been evaluated per guidance contained in NUREG-1536, Revision 1 and NUREG-1757, Volume 1, Revision 2.

RAI-2

(RAI-2 Issued May 18, 2021): The regulation at 10 CFR 50.54, Conditions of licenses, paragraph 50.54(a)(1), states in part:

Each nuclear power plant or fuel reprocessing plant licensee subject to the quality assurance criteria in appendix B of this part shall implement, under Section 50.34(b)(6)(ii) or Section 52.79 of this chapter, the quality assurance program described or referenced in the safety analysis report, including changes

to that report.

The IPEC QAPM, Revision 3, paragraph A.1.a. states in part, “The interface and coordination with the Entergy Fleet QAPM ensure the requirements of the IPEC QAPM are satisfied.” Clarify how the interface and coordination with the Entergy Fleet QAPM ensure the requirements of the IPEC QAPM satisfy requirements of 10 CFR 50.54(a)(1).

NRC Staff Evaluation/Assessment: Clarification is not required, as the interface and coordination with the Entergy Fleet QAPM is no longer applicable. The HDI DQAP does not have to interface with the plant specific quality assurance program.

RAI-3

(RAI-3 Issued May 18, 2021): NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition,” (ADAMS Accession No. ML052350376), Section 17.3, “Quality Assurance Program Description,” Paragraph A.1.c. states in part, “A list of items under the control of the quality assurance program is to be established and maintained at the applicant's facility.”

Paragraph A.1 of the IPEC QAPM does not address how a list of items under the control of the quality assurance program is to be established and maintained at the applicant's facility. Clarify how the IPEC QAPM, specifically in paragraph A.1, establishes and maintains a list of items under the control of the quality assurance program at the applicant's facility.

NRC Staff Evaluation: Paragraph 2.1 of the HDI DQAP states in part, “The DQAP requirements apply to (i.e. the following are in the scope of the DQAP) structure, system, or components (SSCs) designated as safety significant, applicable regulatory programs, and for other applicable activities and SSCs identified in either the facility-specific Decommissioning Safety Analysis Report (DSAR) or Appendices of this DQAP.

NRC Staff Assessment: Additional information is not required because HDI DQAP satisfies the regulatory guidance of NUREG-0800 Section 17.3.

RAI-4

(RAI-4 Issued May 18, 2021): NUREG-0800, Section 17.3, Paragraph A.3.c. states, “Senior-level management is to assess annually the adequacy of the QA program's implementation.”

Paragraph A.3 of the IPEC QAPM does not address how senior-level management is to assess annually the adequacy of the QA program's implementation. Clarify how the IPEC QAPM, specifically in paragraph A.3, provides responsibility for senior-level management to assess the adequacy of the QA program's implementation annually.

NRC Staff Evaluation: Paragraph 2.6.1 of the HDI DQAP states in part, “The status and

effectiveness of the DQAP and its implementation is periodically reviewed by the management of the organization responsible for its execution. In addition, the effectiveness of the DQAP is evaluated and reported by Quality Assurance through the audit and inspection functions.”

Also, paragraph 18.2 states in part, “The internal audit program is conducted on a performance driven frequency that is commensurate with the status and importance of the activity to be completed but does not exceed 24-months, unless otherwise required by regulation.”

NRC Staff Assessment: Additional information is not required because HDI DQAP satisfies the regulatory guidance of NUREG-0800 Section 17.3.

RAI-5

(RAI-5 Issued May 18, 2021): NUREG-0800 SRP 17.3 Section II.A.7 states in part, “Except where acceptable alternatives are provided, the applicant is to comply with the regulatory positions in the appropriate revisions of the regulatory guides listed in Section VI.A of this chapter” and “in Section VI.B of this chapter.” Table 1 of the QAPM does not list the following regulatory guides specified in NUREG 0800.”

NUREG-0800 SRP 17.3 Section VI. “References” cites the following regulatory or programmatic QA guidance:

- Regulatory Guide 1.28, “Quality Assurance Program Requirements (Design and Construction),” using NQA-1 and NQA-2
- Radioactive waste QA controls are to be in accordance with Regulatory Position 6 of Regulatory Guide 1.143, “Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light Water-cooled Nuclear Power Plants.”
- Regulatory Guide 7.10, “Establishing Quality Assurance Programs for Packaging Used in the Transport of Radioactive Material.”

Explain why Table 1 of the IPEC QAPM does not commit to the listed references.

NRC Staff Evaluation: NRC staff used the guidance contained in NUREG-1536, Revision 1, and NUREG-1757, Volume 1, Revision 2, in evaluating the adequacy of the HDI DQAP. These two guidance documents contain the regulatory guidance of Regulatory Guide 1.28 and Regulatory Position 6 of Regulatory Guide 1.143.

Paragraph 1.2.1 of Appendix A to the HDI DQAP states in part, “When HDI contracts with vendors to transport radioactive waste in NRC approved shipping packages, the contract is written such that the requirements of 10 CFR 71, Subpart H and Regulatory Guide 7.10,

Revision 3 (6/15), "Establishing Quality Assurance Programs for Packaging Used in the Transportation of Radioactive Material" are met.

NRC Staff Assessment: Additional information is not required because HDI DQAP have been adequately evaluated with NUREG-1536, Revision 1 and NUREG-1757, Volume 1, Revision 2. Regulatory Guide 1.28 and Regulatory Position 6 of Regulatory Guide 1.143 are covered in these two guidance documents, and Regulatory Guide 7.10 is discussed in Paragraph 1.2.1 of Appendix A to the HDI DQAP.

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