

U.S. NUCLEAR REGULATORY COMMISSION  
DOCKETS 50-213, 72-39  
CONNECTICUT YANKEE ATOMIC POWER COMPANY  
HADDAM NECK PLANT  
INDEPENDENT SPENT FUEL STORAGE INSTALLATION  
ISSUANCE OF ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT  
REGARDING THE REQUEST FOR EXEMPTION  
IN ACCORDANCE WITH 10 CFR 72.7

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Issuance of Environmental Assessment and Finding of No Significant Impact.

**FOR FURTHER INFORMATION CONTACT:** John Goshen, Project Manager, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Telephone: (301) 492-3325; Fax number: (301) 492-3342; E-mail: [john.goshen@nrc.gov](mailto:john.goshen@nrc.gov).

INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption to Connecticut Yankee Atomic Power Company (CYAPCO), pursuant to 10 CFR 72.7, from the specific provisions of 10 CFR 72.212(a)(2), 72.212(b)(2)(i), 72.212(b)(7), and 72.214.

CYAPCO is using a dry cask storage system, the NAC-MPC, Certificate of Compliance (CoC) No. 1025, to store spent nuclear fuel under a general license in an independent spent fuel storage installation (ISFSI) associated with the decommissioned Haddam Neck Plant, located in Middlesex County, Connecticut. CYAPCO stores spent fuel in forty NAC-MPC casks at the CYAPCO ISFSI, all loaded under Amendment No. 4 to CoC No. 1025. Under the current 10 CFR Part 72 regulations, the general licensee is bound by the terms and conditions of the CoC under which it loaded a given cask. Amendment No. 4 will remain in effect for the casks at the CYAPCO ISFSI until the NRC expressly approves the application of changes authorized by a later CoC amendment. Such an approval is typically accomplished through a 10 CFR 72.7 exemption.

In its letter dated September 1, 2009, CYAPCO stated that it intended to adopt Amendment No. 5 to CoC No. 1025 for all forty NAC-MPC casks at the site and specifically requested an exemption from the requirements of Amendment No. 5, Appendix A, Technical Specifications (TS), Section A 5.1, Training Program. The requested exemption would relieve CYAPCO from the requirement to develop training modules under its Systems Approach to Training (SAT) that includes comprehensive instructions for the operation and maintenance of the ISFSI, except for the NAC-MPC System. The NRC has previously granted a similar exemption to CYAPCO from the requirements of CoC No. 1025, Amendment No. 4, in its letter to CYAPCO dated September 22, 2005 ((Agencywide Document Access and Management System (ADAMS) Accession No. ML052660399)).

Implementation of Amendment No. 5 of CoC No. 1025 to all forty NAC-MPC casks will allow a visual alternative to Technical Specification (TS) Surveillance Requirement 3.1.6.1 to verify the operability of the concrete cask heat removal system to maintain safe storage conditions and will also remove a specification in the CoC for tamper indicating devices. The NRC published the direct final rule for Amendment No. 5 of CoC No. 1025 on May 10, 2007

(72 FR 26535), with the effective date of Amendment No. 5 being July 24, 2007 (72 FR 38468, July 13, 2007).

CYAPCO, in its September 1, 2009 letter, did not request that NRC expressly approve implementation of Amendment No. 5 to all forty NAC-MPC casks at the site. CYAPCO did state, however, that it had performed an evaluation to verify that the Haddam Neck Plant ISFSI will fully conform to the terms of CoC No. 1025, Amendment No. 5. Under the current 10 CFR Part 72 regulations, a general licensee, such as CYAPCO, is not authorized to apply changes allowed by a later CoC amendment (in this case, Amendment No. 5) to a cask loaded under an earlier CoC amendment (in this case, Amendment No. 4) without express prior approval of the NRC.<sup>1</sup> Thus, in order to effectuate the requested exemption, the NRC will have to expand the scope of the requested exemption to include the application of the changes authorized by Amendment No. 5 to the subject casks. The applicable regulation, 10 CFR 72.7, allows the NRC to grant exemptions upon its own initiative.

In accordance with the requirements in 10 CFR Part 51, the NRC has prepared an environmental assessment for the NRC action of approving or disapproving an exemption from the requirements of 10 CFR 72.212(a)(2), 72.212(b)(2)(i), 72.212(b)(7), and 72.214, which if approved, will allow CYAPCO to apply the changes authorized by Amendment No. 5 to CoC No. 1025 to all forty NAC-MPC casks at the site. Based on this environmental assessment, the NRC has concluded that a Finding of No Significant Impact is appropriate. The NRC's action to either approve or disapprove of the CYAPCO request for an exemption from the requirements of Appendix A, Section A 5.1, Training Program is categorically excluded from further environmental review in accordance with 10 CFR 51.22(c)(25)(vi)(E).

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<sup>1</sup> See Enforcement Guidance Memorandum 09-006, dated September 15, 2009 (ADAMS Accession No. ML091970035).

## ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: The NRC proposes to issue an exemption to CYAPCO from the requirements of 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), 72.212(b)(7), and 72.214, thereby allowing CYAPCO to apply the changes authorized by Amendment No. 5 to CoC No. 1025 to all forty NAC-MPC casks at the Haddam Neck ISFSI, which were loaded under Amendment No. 4 to CoC No. 1025. Section 72.212(a)(2) provides that the general license is limited to storage of spent fuel in casks approved under the provisions of Part 72; section 72.212(b)(2)(i)(A) requires the general licensee to perform written evaluations, prior to use of a cask, that establish that the conditions set forth in the CoC have been met; section 72.212(b)(7) requires that the general licensee comply with the terms and conditions of the CoC; and section 72.214 lists the cask designs that have been approved by the NRC and are available for use by general licensees under the 10 CFR Part 72 general license. The NRC's regulatory authority to grant these exemptions is 10 CFR 72.7.

Need for the Proposed Action: Implementation of the changes authorized by Amendment No. 5 of CoC No. 1025 to all forty NAC-MPC casks will allow a visual alternative to Technical Specification (TS) Surveillance Requirement 3.1.6.1 to verify the operability of the concrete cask heat removal system to maintain safe storage conditions and will also remove a specification in the CoC for tamper indicating devices. These changes will provide the applicant with significant cost savings and flexibility without any decrease in safety.

Environmental Impacts of the Proposed Action: The NRC has reviewed the exemption request submitted by CYAPCO and has determined that allowing CYAPCO to apply the changes authorized by Amendment No. 5 of CoC No. 1025 to the casks at the Haddam Neck

ISFSI, if approved, would have no significant impact to the environment. In connection with the approval of Amendment No. 5 of CoC 1025, the NRC prepared and published in the *Federal Register* a Finding of No Significant Impact, based upon an environmental assessment, for the generic use of the changes authorized by Amendment No. 5 (72 FR 26535, 26537, May 10, 2007).

Further, NRC has evaluated the impact to public safety that would result from granting the proposed action. The approval of the proposed action would not increase the probability or consequences of accidents, no changes would be made to the types of effluents released offsite, and there would be no increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action. Additionally the proposed action would not involve any construction or other ground disturbing activities, would not change the footprint of the existing ISFSI, and would have no other significant non-radiological impacts. In this regard, and as the ISFSI is located on previously disturbed land, it is extremely unlikely that approval of the proposed action would create any significant impact on the aquatic or terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act, or to essential fish habitat covered by the Magnuson-Stevens Act. Similarly, approval of the proposed action is not the type of activity that has the potential to cause effects on historic or cultural properties, assuming such properties are present at the site of the Haddam Neck ISFSI.

Alternative to the Proposed Action: Since there is no significant environmental impact associated with the proposed action, any alternatives with equal or greater environmental impact are not evaluated. The alternative to the proposed action would be to deny approval of the exemption. This alternative would have the same environmental impact.

Given that there are no significant differences in environmental impact between the proposed action and the alternative considered and that CYAPCO has a legitimate need, the Commission concludes that the preferred alternative is to grant the requested exemption.

#### FINDING OF NO SIGNIFICANT IMPACT

The environmental impacts of the proposed action have been reviewed in accordance with the requirements set forth in 10 CFR Part 51. Based upon the foregoing Environmental Assessment, the Commission finds that the proposed action of granting an exemption from the specific requirements of 10 CFR 72.212(a)(2), 72.212(b)(2)(i), 72.212(b)(7), and 72.214, will not significantly impact the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

#### FURTHER INFORMATION

In accordance with 10 CFR 2.390 of NRC's "Rules of Practice," NRC records and documents related to this action, including the application for exemption and supporting documentation are available electronically at the NRC's Electronic Reading Room, at: <http://www.nrc.gov/reading-rm/adams.html>. From this site, you can access NRC's ADAMS, which provides text and image files of NRC's public documents. The ADAMS Accession Number for the application, dated September 1, 2009, is ML092520319.

If you do not have access to ADAMS, or if there are problems in accessing the documents located in ADAMS, contact NRC's Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

These documents may also be viewed electronically on the public computers located at NRC's PDR, O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852. The PDR reproduction contractor will copy documents, for a fee.

Dated at Rockville, Maryland, this 7<sup>th</sup> day of June 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read 'B. J. Davis', with a stylized flourish at the end.

Jennifer Davis, Acting Chief  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards