

U.S. NUCLEAR REGULATORY COMMISSION  
DOCKETS 50-309, 72-30  
MAINE YANKEE ATOMIC POWER COMPANY.  
INDEPENDENT SPENT FUEL STORAGE INSTALLATION  
ISSUANCE OF ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT  
REGARDING THE REQUEST FOR EXEMPTION FROM  
REQUIREMENTS OF 10 CFR PART 72

**AGENCY:** Nuclear Regulatory Commission.

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

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## INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC or Commission) is considering the issuance of an exemption to Maine Yankee Atomic Power Company (MY), pursuant to 10 CFR

72.7, from the requirements of 10 CFR 72.212(a)(2), 72.212(b)(2)(i), 72.212(b)(7), and 72.214. MY is using a dry cask storage system, the NAC-UMS, Certificate of Compliance (CoC) No. 1015, to store spent nuclear fuel under a general license in an independent spent fuel storage installation (ISFSI) associated with the decommissioned Maine Yankee plant, located in Wiscasset, Maine. MY stores spent fuel in sixty NAC-UMS casks at the MY ISFSI, all loaded under Amendment No. 2 to CoC No. 1015. 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. 2 will remain in effect for the casks at the MY 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 January 15, 2010, MY stated that it desired to adopt Amendment No. 5 to CoC No. 1015 for all sixty NAC-UMS casks at the site. Adaption of the changes authorized by Amendment No. 5 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 the for a specification in the CoC for tamper indicating devices. CoC No. 1015, Amendment No. 5 was issued by the NRC on September 19, 2007.

MY initiated an evaluation to determine if the sixty casks conform to the requirements of Amendment No. 5 of CoC No. 1015. The evaluation concluded that 59 of the 60 casks conform to Amendment No. 5. The sixtieth cask, NAC-UMS-TSC-790-016, did not comply with the 25-day of requirement in TS Limiting Condition of Operation (LCO) 3.1.4, "Canister Maximum Time in Transfer Cask," of Amendment No. 5. MY requested an exemption from TS LCO 3.1.4 in its January 15, 2010 letter. Although not expressly requested by MY, implicit in MY's exemption request is the application of the changes authorized by Amendment No. 5 to the casks at the ISFSI (which are presently operated under Amendment No. 2).

Under the current 10 CFR 72.212, a general licensee, such as MY, 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. 2) 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.

MY also requests continuation of three exemptions from the terms and conditions of Amendment No. 5, similar to three previously granted exemptions of Amendment No. 2. These are:

1. Appendix A, Section A 5.1, Training Program. Exemption from the requirement to develop a systematic approach to training (SAT) that includes comprehensive instructions for the operation and maintenance of the ISFSI, except for the NAC-UMS Universal Storage System. This was approved by the NRC letter in its letter to MY dated December 13, 2004 (ADAMS Accession Number ML043620200).
2. Appendix A, Section A 5.5 (Section A. 5.4 in Amendment No. 2), Radioactive Effluent Control Program. Exemption from the requirement to submit an annual report pursuant to 10 CFR 72.44(d)(3) or 10 CFR 50.36(a). This was approved by the NRC letter in its letter to MY dated December 13, 2004 (ADAMS Accession Number ML043620200).
3. Appendix B, Section B 3.4.2.6. Exemption from the requirement to maintain a coefficient of friction on the ISFSI pad surface of at least 0.5. This was approved by the NRC in its letter to MY dated February 1, 2004 (ADAMS Accession Number ML 0403507970).

The requests for an exemption from the requirements of Appendix A, Section A 5.5, Radioactive Effluent Control Program, and Appendix A, Section A 5.1, Training Program are

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

categorically excluded from further environmental review in accordance with 10 CFR 51.22(c)(25)(vi)(B) and (E), respectively. In accordance with the requirements in 10 CFR Part 51, the NRC prepared an Environmental Assessment to analyze the remainder of MY's exemption requests. Based on the Environmental Assessment, the NRC has concluded that a Finding of No Significant Impact is appropriate.

#### ENVIRONMENTAL ASSESSMENT (EA)

Identification of Proposed Action: The NRC proposes to issue exemptions that would relieve MY from complying with the requirements of 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), 72.212(b)(7), and 72.214. 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.

Specifically, the proposed action would be allowing MY to apply the changes authorized by Amendment No. 5 to CoC No. 1015 to the casks at the MY ISFSI and further, to exempt MY from the requirements of the following terms and conditions of Amendment No. 5 to CoC No. 1015:

1. TS LCO 3.1.4, "Canister Maximum Time in Transfer Cask," and
2. Appendix B, Section B 3.4.2.6.

The NRC's regulatory authority to grant these exemptions is 10 CFR 72.7.

Need for the Proposed Action: Approval of the proposed exemption requests will provide MY with significant cost savings and flexibility, without any decrease in safety.

Environmental Impacts of the Proposed Action: CoC NO. 1015, Amendment No. 5 has been previously evaluated by the NRC, and its adoption presents no additional radiological environmental impacts. The exemption from the requirement to maintain a coefficient of friction on the ISFSI pad surface of at least 0.5 was previously evaluated by the by the NRC, and it was determined to pose no increased risk to health and safety. The proposed action also includes consideration of an exemption from the requirements of TS LCO 3.1.4 of Amendment No. 5 for one storage canister at the MY ISFSI. The affected storage canister had a heat load of 9.59kW, and was placed in a transfer cask for a total of 43 days between December 28, 2002, and February 18, 2003. At that time the MY ISFSI operated under the provisions of CoC No. 1015, Amendment No. 2, and the LCO 3.1.4 time limit for a canister having a content decay hear load of less than or equal to 14kW was unlimited. During this period the storage canister was in full compliance with CoC No. 1015, Amendment No. 2, and its stored spent fuel were maintained in a safe condition during the time the canister was in the transfer cask. The transfer of the loaded canister was completed in a safe manner to ensure the transfer cask was not used as a long-term storage device.

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 MY 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 the applicant has a legitimate need, the Commission concludes that the preferred alternative is to grant the requested exemptions.

#### 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 exemptions from 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), 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 exemptions.

## FURTHER INFORMATION

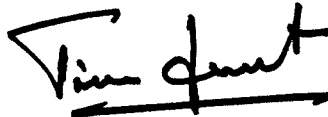
In accordance with 10 CFR 2.390 of NRC's "Rules of Practice," NRC records and documents related to this action, including the application for exemption and supporting documentation are available electronically at the NRC's Electronic Reading Room, at: <http://www.nrc.gov/reading-rm/adams.html>. From 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 January 15, 2010, is ML100260280.

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 4<sup>th</sup> day of June 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Pierre Saverot", with a horizontal line drawn underneath the signature.

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