

**MAINE YANKEE**  
**321 Old Ferry Road, Wiscasset, Maine 04578**

April 14, 2016  
OMY-16-024  
Re: 10 CFR 72.4 and 10 CFR 72.7

ATTN: Document Control Desk,  
Director, Division of Spent Fuel Management  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Maine Yankee Atomic Power Company  
Maine Yankee Independent Spent Fuel Storage Installation  
NRC License No. DPR-36 (NRC Docket No. 50-309) 72-1015

**Subject:** Request for Exemption from Certain Requirements of 10 CFR 72.212 and  
10 CFR 72.214 for the Maine Yankee Independent Spent Fuel Storage Installation

Pursuant to 10 CFR 72.7, "Specific Exemptions," Maine Yankee Atomic Power Company (Maine Yankee) requests an exemption from the requirements of 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.212(b)(11), and 10 CFR 72.214 for the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI). The requested exemption is for the limited purpose of allowing Maine Yankee to reinstate the version of Technical Specification (TS) A 3.2.2, "Concrete Cask Average Surface Dose Rate," established in Amendment No. 2 of Certificate of Compliance (CoC) No. 72-1015 as the applicable TS for Maine Yankee, in lieu of the version of TS A 3.2.2 established in Amendment No. 5 of the NAC-UMS<sup>®</sup> CoC No. 72-1015. Maine Yankee loaded the 60 canisters and casks with spent fuel in accordance with Amendment No. 2 of CoC No. 72-1015, and re-registered the canisters and casks to Amendment No. 5 of CoC No. 72-1015 at a later time. The exemption request is provided in Attachment 1.

Maine Yankee currently remains in compliance with the NAC-UMS<sup>®</sup> Limiting Condition for Operation 3.2.2, as established in CoC No. 72-1015, Amendment No. 5 and any violation of the current TS would be the result of a hypothetical, beyond design basis event. Thus, there is no exigent or emergency need for the exemption. However, Maine Yankee has identified a discrepancy in that TS that could require a CoC amendment or an exemption in the future. Specifically, if a beyond design basis event occurs that requires Maine Yankee to comply with Required Action B.1 of NAC-UMS<sup>®</sup> TS A 3.2.2, then the need for regulatory action would become urgent for Maine Yankee to avoid an unnecessary violation. Maine Yankee seeks to resolve the discrepancy by this exemption and given that this hypothetical event is extremely unlikely to occur, requests approval of this exemption request by September 30, 2016.

The exemption request has been discussed with NAC, the Certificate of Compliance Holder for the NAC-UMS<sup>®</sup> System, and a copy of the exemption request will be provided to them as part of the distribution of this letter. Granting Maine Yankee an exemption to restore the version of TS A 3.2.2 as defined in Amendment No. 2 of CoC No. 72-1015 would not result in any impact

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to the safe storage of the spent fuel at the ISFSI. Amendment No. 2 of CoC No. 72-1015 remains technically valid. Maine Yankee established that each of the casks met the surface dose rate requirements for the sides, top, and inlets and outlets established in Limiting Condition for Operation 3.2.2 in accordance with Surveillance Requirement (SR) 3.2.2.1 (Amendment No. 2). There are no additional casks to be loaded at Maine Yankee, so no additional performances of SR 3.2.2.1 will be required. In addition, the casks and canisters have been in storage for a number of years. The cask surface dose rates and canister heat loads have declined naturally and will continue to decline over time. Thus, the requested one-time exemption to permanently utilize the NAC-UMS CoC 72-1015 Amendment No. 2 version of TS A 3.2.2 is the prudent action to resolve the TS discrepancy.

There are no regulatory commitments in this letter or Attachment 1.

If you have any questions regarding this submittal, please do not hesitate to contact me at (207) 882-1303.

Respectfully,

  
J. Stanley Brown, P.E.  
ISFSI Manager

Attachment:

1. Maine Yankee Request for Exemption from Certain Requirements of 10 CFR 72.212 and 10 CFR 72.214

cc: D. Dorman, NRC Region I Administrator  
R. Powell, Chief, Decommissioning Branch, NRC, Region I  
J. Goshen, NRC Project Manager  
P. J. Dostie, SNSI, State of Maine  
J. Hyland, State of Maine  
W. Fowler, NAC  
E. Shewbridge, NAC  
G. Carver, NAC

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**10 CFR 72.212 and 10 CFR 72.214**

**1.0 Request for Exemption**

Pursuant to 10 CFR 72.7, "Specific Exemptions," Maine Yankee Atomic Power Company (Maine Yankee) requests an exemption from the requirements of 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.212(b)(11), and 10 CFR 72.214 for the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI). Specifically, Maine Yankee is requesting the proposed site-specific exemption to allow restoration of the version of Technical Specification (TS) A 3.2.2 established in Amendment No. 2 of NAC-UMS<sup>®</sup> Certificate of Compliance (CoC) No. 72-1015 as the applicable TS for Maine Yankee, in lieu of the version of TS A 3.2.2 established in Amendment No. 5 of the NAC-UMS<sup>®</sup> CoC No. 72-1015. Maine Yankee loaded the 60 canisters and casks with spent fuel in accordance with Amendment No. 2 of CoC No. 72-1015, and re-registered the canisters and casks to Amendment No. 5 of CoC No. 72-1015 at a later time.

This exemption is required to resolve a potential compliance issue with the ability to remove all fuel assemblies from the affected NAC-UMS<sup>®</sup> System within 30 days to comply with Required Action B.1 of TS A 3.2.2 in the event an acceptance criterion of Limiting Condition for Operation (LCO) 3.2.2 is not met during STORAGE OPERATIONS and Required Action A.1 or A.2 of NAC-UMS<sup>®</sup> TS A. 3.2.2 cannot be met within the associated Completion Time.

**2.0 Background**

10 CFR 72.210 establishes a general license to store spent fuel in an ISFSI at reactor sites as long as the 10 CFR 50 reactor license remains in effect. 10 CFR 72.212(a)(2) limits the storage of spent fuel to casks approved in 10 CFR 72, Subpart K. 10 CFR 72.212(b)(11) states that the casks "are approved for storage under the conditions specified in their Certificates of Compliance."

The Nuclear Regulatory Commission (NRC) approved the use of the NAC-UMS<sup>®</sup> System by issuing CoC 72-1015 (effective November 20, 2000) (Reference 1). This constituted NRC approval and the conditions for use in storing spent fuel under the general license provisions of 10 CFR 72.210.

Maine Yankee is a 10 CFR 72 general licensee that utilizes the NAC-UMS<sup>®</sup> System in accordance with the requirements of the NAC-UMS<sup>®</sup> System CoC No. 72-1015. The regulations require Maine Yankee to comply with the terms and conditions of NAC-UMS<sup>®</sup> CoC No. 72-1015, including, but not limited to, the associated Technical Specifications.

On January 23, 2002 (effective date December 31, 2001), the NRC issued Amendment No. 2 to CoC No. 72-1015 for the NAC-UMS<sup>®</sup> System (Reference 2). This document provided the licensing basis for the design, fabrication and initial spent fuel storage of the NAC-UMS<sup>®</sup> System at Maine Yankee. Maine Yankee utilized the NAC-UMS<sup>®</sup> System as defined in Amendment No. 2 to load and store the spent fuel into the NAC-UMS<sup>®</sup> canisters and casks.

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Subsequent to the completion of loading and storage of the canisters and casks for Maine Yankee, on July 12, 2011, Maine Yankee notified the NRC (Reference 6) that the 60 NAC-UMS<sup>®</sup> canisters and casks storing spent fuel at the Maine Yankee ISFSI would be registered to Amendment No. 5 of NAC-UMS<sup>®</sup> CoC No. 72-1015 (Reference 3).

At the time each of the 60 casks were loaded, Maine Yankee complied with the version of NAC-UMS<sup>®</sup> TS A 3.2.2 provided in Amendment No. 2 of CoC No. 72-1015 to establish that the average surface dose rates of the sides, top, and inlets and outlets of each concrete cask did not exceed the limits established in LCO 3.2.2. Amendment No. 2 defines the Applicability for NAC-UMS<sup>®</sup> TS A 3.2.2 as “During LOADING OPERATIONS.” Amendment No. 2 also defines the Frequency for Surveillance Requirement (SR) 3.2.2.1 as “Once after completion of transfer of CANISTER into CONCRETE CASK and prior to beginning STORAGE OPERATIONS.” Prior to each of the casks entering STORAGE OPERATIONS, Maine Yankee performed and met the Amendment No. 2 version of SR 3.2.2.1 for each cask.

When Maine Yankee registered the previously loaded casks and canisters to Amendment No. 5 of CoC No. 72-1015, the Applicability of NAC-UMS<sup>®</sup> TS A 3.2.2 changed from “During LOADING OPERATIONS” to “During STORAGE OPERATIONS.” In addition, the Frequency for SR 3.2.2.1 changed to “Prior to STORAGE OPERATIONS.” SR 3.2.2.1 is utilized to establish that LCO 3.2.2 is met. As noted above, Maine Yankee previously demonstrated that each of the 60 casks had met the average surface dose rates of the sides, top, and inlets and outlets limits established in LCO 3.2.2. No additional performance of the surveillance was required for the existing casks. Also, the change in the Applicability for TS A 3.2.2 was described as an “Editorial Consistency” change by the NRC in the Safety Evaluation Report (SER) for Amendment No. 3 of the NAC-UMS<sup>®</sup> CoC (Reference 5).

The Bases for SR 3.2.2.1 in Appendix 12C of the NAC-UMS<sup>®</sup> FSAR and the Frequency for SR 3.2.2.1 establish that the intent of TS A 3.2.2 was to ensure the proper loading of the CONCRETE CASKs prior to the beginning of STORAGE OPERATIONS. The Bases for SR 3.2.2.1 states:

“The SR ensures that the CONCRETE CASK average surface dose rates are within the LCO limits after transfer of the CANISTER into the CONCRETE CASK and prior to the beginning of STORAGE OPERATIONS. This Frequency is acceptable as corrective actions can be taken before off-site dose limits are compromised...”

Maine Yankee continues to meet LCO 3.2.2 of TS A 3.2.2 provided in Amendment No. 5 and Amendment No. 2 of CoC No. 72-1015, because no design basis condition has been identified that would challenge the results of the surveillances performed to satisfy SR 3.2.2.1. There are no additional casks to be loaded at Maine Yankee, so no additional performances of SR 3.2.2.1 will be required. In addition, the canisters have been in storage for a number of years. The cask surface dose rates and canister heat loads have declined naturally and will continue to decline over time.

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NAC-UMS® SR 3.0.1 states:

“SRs shall be met during the specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be a failure to meet the LCO...”

While no additional performances of SR 3.2.2.1 are required for the existing casks, the occurrence of a beyond design basis event could possibly lead to a condition that would require the declaration that SR 3.2.2.1 is no longer met and that LCO 3.2.2 is not met in accordance with NAC-UMS® LCO 3.0.2. As a result, entry into Condition A would be required, and Maine Yankee would have to perform the following actions as defined in Required Actions A.1 and A.2 within the associated Completion Times.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. CONCRETE CASK average surface dose rate limits not met	A.1 Administratively verify correct fuel loading	24 hours
	AND	
	A.2 Perform analysis to verify compliance with the ISFSI offsite radiation protection requirements of 10 CFR 20 and 10 CFR 72	7 days

In the very unlikely event that Maine Yankee could not perform Required Action A.1 or Required Action A.2 within the associated Completion Time, Condition B would be entered and Required Action B.1 would require the removal of the fuel assemblies from the affected NAC-UMS® System within 30 days. The Bases for NAC-UMS® TS A 3.2.2 Required Action B.1 states:

“If it is verified that the fuel was misloaded, or that the ISFSI offsite radiation protection requirements of 10 CFR Part 20 or 10 CFR Part 72 will not be met with the CONCRETE CASK average surface dose rates above the LCO limit, the fuel assemblies must be placed in a safe condition in the spent fuel pool. The Completion Time is reasonable, based on the time required to transport the CONCRETE CASK, transfer the CANISTER to the TRANSFER CASK, remove the structural lid and vent and drain port cover welds, perform fuel cooldown operations, cut the shield lid weld, move the TRANSFER CASK and CANISTER into the spent fuel pool, remove the shield lid, and remove the spent fuel assemblies in an orderly manner and without challenging personnel.”

Transfer of the spent fuel to the Maine Yankee ISFSI was completed in February 2004. Maine Yankee conducted decommissioning activities in accordance with the approved License

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Termination Plan (LTP) from February 2003 to June 2005. This included decommissioning of the spent fuel pool. Pursuant to 10 CFR 50.90 and in accordance with the NRC approved LTP, Maine Yankee submitted an application to amend its facility operating license to release the remaining land under License No. DPR-36, with the exception of the land where the ISFSI is located and a parcel of land adjacent to the ISFSI. The NRC approved Maine Yankee's license amendment request on September 30, 2005 (Reference 9).

Maine Yankee's spent fuel pool was decommissioned prior to Amendment No. 5 of NAC-UMS<sup>®</sup> CoC No. 72-1015 (Reference 3) becoming effective on January 12, 2009. In addition, Maine Yankee did not adopt Amendment No. 5 until 2011. Maine Yankee notified the NRC on July 12, 2011, that the 60 NAC-UMS<sup>®</sup> canisters and casks storing spent fuel at the Maine Yankee ISFSI would be registered to Amendment No. 5 of NAC-UMS<sup>®</sup> CoC No. 72-1015 (Reference 6). At the time the casks and canisters were registered to Amendment No. 5, Maine Yankee did not possess a spent fuel pool. Under this condition, Maine Yankee does not have the capability to remove the fuel assemblies from the affected NAC-UMS<sup>®</sup> System within 30 days, as defined in the Bases for NAC-UMS<sup>®</sup> TS A 3.2.2 Required Action B.1.

### **3.0 Technical Justification**

On January 23, 2002 (effective date December 31, 2001), the NRC issued CoC No. 72-1015 Amendment No. 2 to NAC (Reference 2). This document provided the licensing basis for the design, fabrication and initial spent fuel storage of the NAC-UMS<sup>®</sup> system at Maine Yankee. Maine Yankee loaded the spent fuel into the NAC-UMS<sup>®</sup> canisters and casks in accordance with Amendment No. 2 of CoC No. 72-1015. Maine Yankee complied with the Amendment No. 2 version of NAC-UMS<sup>®</sup> TS A 3.2.2 to establish that the average surface dose rates of the sides, top, and inlets and outlets for each concrete cask did not exceed the limits established in LCO 3.2.2. The Applicability for NAC-UMS<sup>®</sup> TS A 3.2.2 in Amendment No. 2 is defined as "During LOADING OPERATIONS." The Frequency for SR 3.2.2.1 for NAC-UMS<sup>®</sup> TS A 3.2.2 in Amendment No. 2 is defined as "Once after completion of transfer of CANISTER into CONCRETE CASK and prior to beginning STORAGE OPERATIONS."

During the Maine Yankee loading campaign, Maine Yankee performed and met the Amendment No. 2 version of SR 3.2.2.1 for each cask. This established that LCO 3.2.2 for NAC-UMS<sup>®</sup> TS A 3.2.2 was met.

On March 22, 2004, the NRC issued CoC No. 72-1015 Amendment No. 3 to NAC (Reference 4). This document changed the Applicability for NAC-UMS<sup>®</sup> TS A 3.2.2 from "During LOADING OPERATIONS" to "During STORAGE OPERATIONS." The Frequency for SR 3.2.2.1 was not changed. The NRC's Safety Evaluation Report for Amendment No. 3 to CoC No. 72-1015 identified this change as an "Editorial Consistency." (Reference 5).

The Applicability was changed from "During LOADING OPERATIONS" in Amendment No. 2 to "During STORAGE OPERATIONS" in Amendment No. 3 primarily because of the experience gained during the Maine Yankee loading campaign. The term LOADING OPERATIONS is specifically defined in the TS A 1.1, "Definitions." Since LOADING

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OPERATIONS ends when the NAC-UMS<sup>®</sup> System is secured to the transporter, the Amendment No. 2 version of SR 3.2.2.1 provides a very narrow timeframe to perform SR 3.2.2.1. This is because TRANSPORT OPERATIONS begins when the NAC-UMS<sup>®</sup> System is secured to the transporter and ends when the NAC-UMS<sup>®</sup> System is at its destination and no longer secured on the transporter, generally the beginning of STORAGE OPERATIONS.

The Applicability of TS A 3.2.2 from Amendment No. 3 of CoC No. 72-1015 (Reference 4) is the same as the Applicability of TS A 3.2.2 established in Amendment No. 5 of CoC No. 72-1015 (Reference 3). When Maine Yankee registered the previously loaded casks and canisters to Amendment No. 5 of CoC No. 72-1015, the Applicability of NAC-UMS<sup>®</sup> TS A 3.2.2 changed from “During LOADING OPERATIONS” to “During STORAGE OPERATIONS” (Reference 6).

Prior to Maine Yankee notifying the NRC of a change in the registered amendment, a CoC Amendment Reconciliation was performed by NAC (Reference 8). While a number of changes were evaluated for impact between Amendment No. 2 and Amendment No. 3 of NAC CoC No. 72-1015, the change in the Applicability of TS A 3.2.2 from “During LOADING OPERATIONS” to “During STORAGE OPERATIONS” was not specifically evaluated by the CoC Holder.

The NRC had previously described the change in Applicability of TS A 3.2.2 as an “Editorial Consistency” change in the Safety Evaluation Report for Amendment 3 to the NAC-UMS<sup>®</sup> CoC No. 72-1015 (Reference 5). In addition, Maine Yankee had previously performed and met SR 3.2.2.1 for each of the 60 NAC-UMS<sup>®</sup> casks. Thus, SR 3.2.2.1 does not require another performance of SR 3.2.2.1.

Each Amendment of the NAC-UMS<sup>®</sup> CoC No. 72-1015 remains technically valid, because a 10 CFR 72 general licensee that registers a NAC-UMS<sup>®</sup> System loaded under an Amendment is not required to adopt subsequent Amendments to the CoC.

Granting Maine Yankee an exemption to restore the version of TS A 3.2.2 as defined in Amendment No. 2 of CoC No. 72-1015 would not result in any impact to the safe storage of the spent fuel at the ISFSI. Amendment No. 2 of CoC No. 72-1015 remains technically valid. Maine Yankee established that each of the casks met the surface dose rate requirements for the sides, top, and inlets and outlets established in LCO 3.2.2 in accordance with SR 3.2.2.1 (Amendment No. 2). There are no additional casks to be loaded at Maine Yankee, so no additional performances of SR 3.2.2.1 will be required. In addition, the casks and canisters have been in storage for a number of years. The cask surface dose rates and canister heat loads have declined naturally and will continue to decline over time.

#### **4.0 Applicable Regulations**

The specific requirements for granting exemptions to 10 CFR Part 72 licensing requirements are set forth in 10 CFR 72.7, “Specific exemptions,” which states:

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“The Commission may, upon application by any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.”

**5.0 Exemption Request Considerations**

Maine Yankee has reviewed 10 CFR 72 and determined that an exemption to certain requirements of 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.212(b)(11), and 10 CFR 72.214 are necessary to permit the Maine Yankee ISFSI to restore the version of NAC-UMS<sup>®</sup> TS A 3.2.2 provided in Amendment No. 2 of CoC No. 72-1015 as the applicable Technical Specification in lieu of the version of NAC-UMS<sup>®</sup> TS A 3.2.2 provided in Amendment No. 5 of CoC No. 72-1015.

5.1 Authorized by Law

10 CFR 72.7 allows the NRC to grant exemptions from the requirements of 10 CFR 72. Granting of the proposed exemptions will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemptions would be authorized by law.

5.2 No Undue Risk to Public Health and Safety

Amendment No. 2 of CoC No. 72-1015 remains technically valid and sufficient to assure that there is no undue risk to public health and safety. Maine Yankee established that each of the 60 casks that are utilized to store spent fuel met the average surface dose rate requirements for the sides, top, and inlets and outlets established in the version of LCO 3.2.2 in accordance with SR 3.2.2.1 (Amendment No. 2). There are no additional casks to be loaded with spent fuel at Maine Yankee, so no additional performances of SR 3.2.2.1 will be required. In addition, the casks and canisters have been in storage for a number of years. The cask surface dose rates and canister heat loads have declined naturally and will continue to decline over time.

No new accident precursors are created by utilizing NAC-UMS<sup>®</sup> TS A 3.2.2 as provided in Amendment No. 2 of CoC No. 72-1015 versus NAC-UMS<sup>®</sup> TS A 3.2.2 as provided in Amendment No. 5 of CoC No. 72-1015. In addition, the probability or consequences of postulated accidents are not increased. No changes are being made in the types or amounts of effluents that may be released offsite. There is no significant increase in occupational or public radiation exposure. Consequently, there is no undue risk to public health and safety.

Given the current static condition of the Maine Yankee ISFSI, only a beyond design basis event would drive the average surface dose rates on the sides, top, or inlets and outlets of one or more casks to exceed the applicable acceptance criterion established in NAC-UMS<sup>®</sup> TS A 3.2.2. This event would be managed in accordance with the Maine Yankee Corrective Action Program and, potentially, the Maine Yankee ISFSI Emergency Plan.

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**5.3 Consistent with the Common Defense and Security**

The Maine Yankee ISFSI will continue to be managed in accordance with the Maine Yankee ISFSI Physical Security Plan, and the outstanding NRC Orders and Interim Compensatory Measures and associated Maine Yankee responses. The proposed exemptions will not alter the scope of the licensee's security program. Therefore, the common defense and security is not impacted by this exemption.

**6.0 Environmental Consideration**

The proposed exemption does 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. The ISFSI is located on previously disturbed land, thus, the proposed exemption does not have the potential to create any significant impact on aquatic or terrestrial habitat in the vicinity of the ISFSI, or to threatened, endangered, or protected species. In addition, the proposed exemption does not have the potential to cause effects on historic or cultural properties, assuming such properties are present at the site of the Maine Yankee ISFSI.

The proposed exemption would meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(25), because the proposed exemption involves: (i) no significant hazards consideration; (ii) no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) no significant increase in individual or cumulative public or occupational radiation exposure; (iv) no significant construction impact; (v) no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which the exemption is sought involve inspection or surveillance requirements. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemption.

**7.0 Conclusion**

Maine Yankee has reviewed 10 CFR 72 and determined that an exemption to certain requirements of 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.212(b)(11), and 10 CFR 72.214 is necessary to permit the Maine Yankee ISFSI to utilize the version of Technical Specification (TS) A 3.2.2 established in Amendment No. 2 of NAC-UMS<sup>®</sup> CoC No. 72-1015 as the applicable TS for Maine Yankee, in lieu of the version of TS A 3.2.2 established in Amendment No. 5 of the NAC-UMS<sup>®</sup> CoC No. 72-1015.

Such an exemption meets the specific exemption requirements of 10 CFR 72.7. In addition, the exemption request would meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(25).

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Maine Yankee currently remains in compliance with the NAC-UMS<sup>®</sup> Limiting Condition for Operation 3.2.2, as established in CoC No. 72-1015, Amendment No. 5 and any violation of the current TS would be the result of a hypothetical, beyond design basis event. Thus, there is no exigent or emergency need for the exemption. However, Maine Yankee has identified a discrepancy in that TS that could require a CoC amendment or an exemption in the future. Specifically, if a beyond design basis event occurs that requires Maine Yankee to comply with Required Action B.1 of NAC-UMS<sup>®</sup> TS A 3.2.2, then the need for regulatory action would become urgent for Maine Yankee to avoid an unnecessary violation. Granting Maine Yankee the exemption to restore the version of TS A 3.2.2 as defined in Amendment No. 2 of CoC No. 72-1015 would not result in any impact to the safe storage of the spent fuel at the ISFSI. Amendment No. 2 of CoC No. 72-1015 remains technically valid. Maine Yankee established that each of the casks met the surface dose rate requirements for the sides, top, and inlets and outlets established in LCO 3.2.2 in accordance with SR 3.2.2.1 (Amendment No. 2). There are no additional casks to be loaded at Maine Yankee, so no additional performances of SR 3.2.2.1 will be required. In addition, the casks and canisters have been in storage for a number of years. The cask surface dose rates and canister heat loads have declined naturally and will continue to decline over time. Thus, the requested one-time exemption to permanently utilize the NAC CoC 72-1015 Amendment No. 2 version of TS A 3.2.2 is the prudent action to resolve the TS discrepancy. Maine Yankee requests approval of this exemption request by September 30, 2016.

## **8.0 Precedent**

No previous examples of an NRC-approved exemption request that dealt with a similar issue could be found. However, on July 14, 2010 (Reference 7) and February 18, 2016 (Reference 10), the NRC granted Maine Yankee exemptions from certain sections of 10 CFR 72.212 and 10 CFR 72.214 regarding the NAC-UMS<sup>®</sup> CoC and its Technical Specifications that establish that this type of exemption request is not a novel approach.

Amendment No. 5 of NAC-MPC CoC No. 1025 contains TS A 3.2.2, "CONCRETE CASK Average Surface Dose Rates," that provides similar requirements regarding average surface dose rates for the sides, top, and inlets and outlets for the CONCRETE CASKs (Reference 11). The Applicability for NAC-MPC TS A 3.2.2 is "Prior to or at the beginning of STORAGE OPERATIONS" and the Frequency for SR 3.2.2.1 is "Once after completion of transfer of CANISTER into CONCRETE CASK and prior to, or at the beginning of STORAGE OPERATIONS." This Technical Specification does not possess the inconsistency between the Applicability and Frequency that exists in the Amendment No. 5 version of NAC-UMS<sup>®</sup> TS A 3.2.2.

## **9.0 References**

1. Certificate of Compliance for the NAC International (NAC) UMS<sup>®</sup> System, U.S. Nuclear Regulatory Commission, dated November 20, 2000.
2. Amendment No. 2 of NAC-UMS<sup>®</sup> Certificate of Compliance No. 72-1015, including Appendix A, "Technical Specifications for the NAC-UMS<sup>®</sup> System."

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3. Amendment No. 5 of NAC-UMS<sup>®</sup> Certificate of Compliance No. 72-1015, including Appendix A, “Technical Specifications for the NAC-UMS<sup>®</sup> System.”
4. Amendment No. 3 of NAC-UMS<sup>®</sup> Certificate of Compliance No. 72-1015, including Appendix A, “Technical Specifications for the NAC-UMS<sup>®</sup> System.”
5. NRC Safety Evaluation Report, Docket No. 72-1015, NAC-UMS<sup>®</sup> Storage System, Certificate of Compliance No. 72-1015, Amendment No. 3, dated March 22, 2004.
6. Letter from J. Connell (Maine Yankee) to Document Control Desk (NRC), Maine Yankee Atomic Power Company Adoption of NAC-UMS<sup>®</sup> System, Amendment No. 5 Certificate of Compliance and Canister Registration, dated July 12, 2011.
7. Letter from J. Goshen (NRC) to J. Connell (Maine Yankee), Maine Yankee Independent Spent Fuel Storage Installation Exemption from 10 CFR 72.212 and 72.214 (TAC No. 24420), dated July 14, 2010.
8. NAC Calculation 12412-9000, “NAC-UMS Certificate of Compliance Amendment Reconciliation for Maine Yankee UMS Transportable Storage Canisters and Vertical Concrete Casks, Operational Procedures, and Fuel Contents,” dated January, 15, 2010.
9. NRC Safety Evaluation Report by the Office of Nuclear Material Safety and Safeguards related to Amendment No. 172 to Facility Operating License No. DPR-36, Maine Yankee Atomic Power Company, Maine Yankee Nuclear Plant, Docket No. 50-309, dated September 30, 2005.
10. Letter from J. Goshen (NRC) to J. Brown (Maine Yankee), Issuance of Exemption from NAC International Certificate of Compliance No. 1015 Fuel Specification and Loading Conditions at the Maine Yankee Independent Spent Fuel Storage Installation (TAC L25053), dated February 18, 2016, with an effective date of February 4, 2016.
11. Certificate of Compliance for the NAC International (NAC) MPC System, U.S. Nuclear Regulatory Commission, effective date July 24, 2007.