YANKEE ATOMIC ELECTRIC COMPANY

Telephone (413) 424-5261

49 Yankee Road, Rowe, Massachusetts 01367

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United States Nuclear Regulatory Commission
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References:
(a) License No. DPR-3 (Docket No. 50-029)
(b) Docket No. 72-31
(c) NAC Certificate of Compliance for Spent Fuel Storage Casks Issued to NAC International Inc. Certificate No. 1025, Amendment 5, effective date of July 24, 2007.
(d) NAC International Safety Evaluation Report (FSAR); Revision 7, for the Multipurpose Canister (NAC-MPC) System, Docket 72-1025.
(e) Yankee Atomic Electric Company Letter BYR 2006-001 "Request for Exemption from Certain Requirements of NRC Regulations 10CFR72.212 (a), 72.212(b)(2)(i), 72.212(b)(7), and 72.214" dated January 9, 2006 .
(f) USNRC Letter to Ms. A. Carson, Licensing Manager, Yankee Atomic Electric Company, "Exemption from 10CFR72.212 and 72.214 for Dry Spent Fuel Storage Activities (TAC NO. L23937) dated June 6, 2006.

Subject: Request for Exemption from Certain Requirements of NRC Regulations 10CFR72.212 (a), 72.212(b)(2)(i), 72.212(b)(7), and 72.214.

Yankee Atomic Electric Company (YAEC) herewith request an exemption from certain requirements of 10CFR72.212(a), 72.212(b)(2)(i), 72.212(b)(7), and 72.214. The Regulations require, in part compliance to the terms and conditions of the NAC-MPC Certificate of Compliance (Reference (c)). The requested exemption would allow YAEC to deviate from the requirements in NAC-MPC System Technical Specification Section A5.1, "Training Program" and Section A5.4, "Radiological Effluent Control Program". Specifically, this exemption, which was previous approved by the USNRC in a letter to Ms. A. Carson (Reference (f)) dated June 6, 2006 for Amendment 3 of the NAC International Certificate No 1025, is being requested for Amendment 5 of the NAC International Certificate (Reference (c)) and would allow continued relief from: (1) the requirements to develop training modules under the

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Systems Approach to Training (SAT) that include comprehensive instructions for the operations and maintenance of Independent Spent Fuel Storage Installations (ISFSI) systems, structures, and components (SSCs) other than the NAC-MPC Systems; and (2) the requirements to submit an annual report of radioactive effluent releases from the ISFSI. YAEC is not requesting an exemption from the requirements to develop modules, under its SAT program for the NAC-MPC System.

Background

On February 27, 1992, YAEC notified the NRC of the company's decision to cease power operations permanently at the Yankee Nuclear Power Station (YNPS). By this date all fuel assemblies had been removed from the Reactor Vessel and stored in the Spent Fuel Pit.

YAEC built and licensed an ISFSI under the general license provision of 10 CFR 72, Subpart K. Subpart K grants a general license for storage of the spent fuel in an independent spent fuel storage installation to persons authorized to possess or operate a nuclear power reactor under 10 CFR 50. By June 2003, all spent fuel had been permanently removed from the YNPS Spent Fuel Pit and stored in the ISFSI.

On January 22, 2010, NAC International completed a reconciliation of YAEC's NAC-MPC Dry Cask Storage System, for its spent fuel, consisting of 15 Vertical Concrete Casks (VCCs), 15 Transportable Storage Canisters and 11 Damage Fuel Cans to NAC Certificate of Compliance for Spent Fuel Storage Casks Certificate No. 1025, Amendment 5, that was effective as of July 24, 2007. To complete the reconciliation process to Amendment 5 (Reference (c)), it has been determined that YAEC needs to apply for the exemption previously approved for Amendment 3 (Reference (f)).

Exemption Request and Discussion

Technical Specification A 5.1, "Training Program"

YAEC request an exemption from the requirements of CoC No. 1025, Amendment 5, Technical Specification, Section A 5.1, Training Program which requires the following:

> "A training program for the NAC-MPC SYSTEM shall be developed under the general licensee's Systems Approach to Training Program. Training Modules shall include comprehensive instructions for all activities related to the NAC-MPC SYSTEM **and the independent spent fuel storage installation (ISFSI)**" [emphasis added.]

The YAEC training program for the NAC-MPC system was developed using the SAT methods. The training modules include comprehensive instructions for the operation and maintenance of the NAC-MPC System. The NAC-MPC System included all of the important-to-safety Structures, Systems, and Components (SSCs) for the ISFSI, including the ISFSI concrete pad. The remaining ISFSI SSCs are not important-to-safety as defined in 10 CFR 72.3. Examples of these SSCs include: the heating and air conditioning systems, electrical distribution system, lighting, fencing and barriers, intrusion detection and alarm systems, and

cask temperature and area radiation monitoring and alarm systems. For activities associated with the operation and maintenance of ISFSI SSCs that are not important-to-safety, YAEC proposes training/instructions in accordance with manufacturer's instructions determined to be applicable and YAEC approved procedures.

The requirements of 10 CFR Part 72, Subpart I "Training and Certification of Personnel" focus on the training and certification of personnel associated with the operation of equipment and controls identified as being important-to-safety in the Safety Analysis Report and in the license. As noted above, the ISFSI SSCs that are not part of the NAC-MPC System are not important-to-safety, and therefore, are not subject to the requirements of 10 CFR 72, Subpart I. The application of an SAT for the training and qualification of personnel who operate systems that are not important-to-safety would result in additional expense for task evaluation, lesson plan development, instruction and administration without a commensurate safety benefit.

Technical Specification A 5.4, "Radioactive Effluent Control Program"

YAEC also requests an exemption from the requirements of CoC No. 1025, Amendment No. 5, Technical Specification, Section A 5.4, Radioactive Effluent Control Program, Paragraph (c) which requires the following:

> "An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3) or 10 CFR 50.36(a)".

Subparagraphs 72.44(d)(3) and 50.36(a) require the licensee to submit an annual report to the Commission that specifies the quantity of each of the principal radionuclides released to the environment in liquid and in gaseous effluents during the previous 12 months of operation and such information as may be required by the Commission to estimate maximum potential radiation dose commitment to the public resulting from effluent releases.

The NAC-MPC System is a sealed and leak-tight spent fuel storage system. Paragraph (a) of Technical Specification A 5.4 states the following:

> "The NAC-MPC System does not create any radioactive materials or have any radioactive waste treatment systems. Therefore, specific operating procedures for the control of radioactive effluents are not required. LCO 3.1.5, CANISTER Helium Leak Rate, provides assurance that there are **no radioactive effluents** from the NAC-MPC SYSTEM. [Emphasis added.]

Since there are no effluent releases from the system, there are no effluent releases to report, and an annual report of liquid or gaseous releases from the system is not necessary and would result in increased operational costs without a commensurate increase in public health and safety. Radiological surveys for the ISFSI, in accordance with site procedures and 10 CFR Part 20, will continue to be performed and direct radiation from the facility will continue to be measured and reported in the Annual Radiological Environmental Operating Report.

Basis

The specific requirements for granting exemptions to 10 CFR Part 72 licensing requirements are set forth in 10 CFR 72.7, "Specific Exemptions" and read as follows:

> 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 the law and will not endanger life or property of the common defense and security and are other wise in the public interest.

The ISFSI regulations cited in this exemption request are contained in 10 CFR 72.212(a), 72.212(b)(2)(i), 72.212(b)(7), and 72.214. These regulations require that YAEC adhere to the conditions of the Certificate of Compliance (including the Technical Specifications) issued to NAC International. The Commission has the legal authority to issue exemptions for the ISFSI as cited in 10 CFR Part 72. This exemption request falls completely within the legal authority cited in 10 CFR Part 72.

The requested exemption results in no additional risk to the public health and safety while reducing cost. The requested exemptions affect only administrative controls in the Technical Specifications, associated with the training program and training personnel in the operation and maintenance of ISFSI SSCs that are not import-to-safety, and annual reporting of radioactive effluent releases from the ISFSI, which have been precluded by the NAC-MPC design and operation. The cost associated with these activities is paid for by the ratepayers throughout the multi-state region that benefit from the power produced by YNPS when it was operating. The ratepayers deserve a cost-efficient operation of the ISFSI that is unencumbered by unnecessary requirements.

The requested exemption does not affect any accident analysis in the NAC-MPC Final Safety Analysis Report or cause any release of radioactive material to the environment. The exemption request does not result in a decrease in YAEC's ability to effectively safeguard the spent fuel stored at the ISFSI. Thus, this exemption would not endanger life or property or the common defense and security.

The proposed action does not affect non-radiological effluents and has no other environmental impacts. Therefore, there are no significant non-radiological impacts associated with the proposed action.

Based upon the above assessment, the proposed actions will not have a significant effect on the quality of the human environment.

Conclusion

The information in this submittal provides the NRC with a sufficient basis for granting an exemption from the requirements of 10 CFR 72.212(a), 72.212(b)(2)(i), 72.212(b)(7), and 72.214. The requested exemption would allow YAEC to deviate from the requirements in the Certificate of Compliance (CoC) No. 1025, Amendment 5, Appendix A, Technical Specification

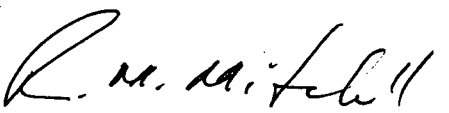
for the NAC-MPC System Section A 5.1, Training Program and Section A 5.4 Radioactive Effluent Control Program. The exemption would relieve YAEC from the requirements to maintain training modules under the System Approach to Training for ISFSI SSCs, other than those for the NAC-MPC System. YAEC will continue to maintain, under its SAT program, training modules for the NAC-MPC System. The exemption would also eliminate the administrative reporting burden associated with an annual report of radioactive effluent releases, as the NAC-MPC System is designed and operated in a manner that precludes releases of radioactive effluent.

YAEC requests that the NRC approve this exemption request in a timely manner.

If you should have any questions regarding this submittal, please contact Mr. Robert Mitchell, ISFSI Manager at (413)-424-5261, extension 303.

Sincerely,

YANKEE ATOMIC ELECTRIC COMPANY



Robert Mitchell
ISFSI Manager

cc: S. J. Collins, Region I Administrator
R. Lorson, Chief, Decommissioning Branch, Region I
V. Ordaz, Director, Division of Spent Fuel Storage and Transportation
R. Hall, NRC Project Manager, Division of Spent Fuel Storage and Transportation
R. Walker, Director, Radiation Control Program, MA Department of Public Health