



YANKEE ATOMIC ELECTRIC COMPANY
49 Yankee Road, Rowe, Massachusetts 01367

May 2, 2019
BYR 2019-009
10 CFR 72.4 and 10 CFR 72.7

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555 - 0001

72-1025

Yankee Atomic Electric Company
Yankee Rowe Independent Spent Fuel Storage Installation
NRC License No. DPR-3 (NRC Docket No. 50-029)

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

Pursuant to 10 CFR 72.7, "Specific exemptions," Yankee Atomic Electric Company (YAEC) 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 Yankee Nuclear Power Station (YNPS) Independent Spent Fuel Storage Installation (ISFSI). On February 5, 2019, the Nuclear Regulatory Commission (NRC) issued Amendment Nos. 7 and 8 to Certificate of Compliance (CoC) No. 1025 for the NAC-MPC System (Reference 1) with an effective date of March 4, 2019. Currently, YAEC's fifteen NAC-MPC canisters storing spent nuclear fuel are registered to Amendment No. 5 of the CoC No. 1025 for the NAC-MPC System (Reference 2). In order to adopt Amendment No. 8 to CoC No. 1025 by registering the fifteen NAC-MPC canisters storing nuclear fuel to this new amendment, YAEC is requesting the continuation of two exemptions from the terms and conditions of Amendment No. 8 of CoC No. 1025 that are the same as previously granted exemptions to Amendment No. 5 of CoC No. 1025 (Reference 3). The exemption request is provided in Attachment 1.

This letter contains no regulatory commitments.

If you have any questions regarding this submittal, please do not hesitate to contact me at (413) 424-5261 ext. 303.

Respectfully,

Shae Hemingway
ISFSI Manager

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References:

1. J. McKirgan (NRC) letter to W. Fowler (NAC) International, Amendment Nos. 7 and 8 to Certificate of Compliance No. 1025 for the NAC-MPC Storage System, dated February 5, 2019 (effective date March 4, 2019) (Accession No. ML19038A256)
2. Letter from R. Mitchell (YAEC) to Document Control Desk (NRC), "Yankee Atomic Electric Company Adoption of NAC-MPC® System Amendment 5 Certificate of Compliance and Canister Registration," dated July 28, 2011 (BYR 2011-018) (Accession No. ML11216A137)
3. Letter from J. Goshen (NRC) to R. Mitchell (YAEC), "Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities - Yankee Atomic Independent Spent Fuel Storage Installation (TAC No. L24421)," dated July 15, 2010 (Accession No. ML102020239)

cc: D. Lew, NRC Region I Administrator
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Attachment 1 to BYR 2019-009
Request for Exemption from Certain Requirements of 10 CFR 72.212 and 10 CFR 72.214
for the Yankee Nuclear Power Station Independent Spent Fuel Storage Installation

1.0 Request for Exemption

Pursuant to 10 CFR 72.7, "Specific exemptions," Yankee Atomic Electric Company (YAEC) requests two exemptions 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 Yankee Nuclear Power Station (YNPS) Independent Spent Fuel Storage Installation (ISFSI). On February 5, 2019, the Nuclear Regulatory Commission (NRC) issued Amendment Nos. 7 and 8 to Certificate of Compliance (CoC) No. 1025 for the NAC-MPC System (Reference 1) with an effective date of March 4, 2019. Currently, YAEC's fifteen NAC-MPC canisters storing spent nuclear fuel are registered to Amendment No. 5 of the CoC No. 1025 for the NAC-MPC System (Reference 2). In order to adopt Amendment No. 8 to CoC No. 1025 by registering the fifteen NAC-MPC canisters storing nuclear fuel to this new amendment, YAEC is requesting the continuation of two exemptions from the terms and conditions of Amendment No. 8 of CoC No. 1025 that are the same as two previously granted exemptions to Amendment No. 5 of CoC No. 1025 (Reference 3). These exemptions 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-MPC system. This exemption was originally approved by the NRC in its letter to YAEC dated June 6, 2006 (Reference 4), and reapproved by the NRC in its letter to YAEC dated July 15, 2010 (Reference 3).
2. Appendix A, Section A 5.4, Radioactive Effluent Control Program. Exemption from the requirement to submit an annual report pursuant to 10 CFR 72.44(d)(3) or 10 CFR 50.36a(a)(2). This was originally approved by the NRC in its letter to YAEC dated June 6, 2006 (Reference 4), and reapproved by the NRC in its letter to YAEC dated July 15, 2010 (Reference 3).

On February 18, 2016 (Reference 5), the NRC granted YAEC an additional exemption from Amendment 5 of NAC-MPC CoC No. 1025 regarding the implementation of NAC-MPC Technical Specification A 5.3 during major snow and ice storms. This exemption will not be required following YAEC's adoption of Amendment No. 8 of NAC-MPC CoC No. 1025, because TS A 5.3 is eliminated in the amendment. Thus, YAEC is not including an exemption request regarding the existing exemption from NAC-MPC TS A 5.3.

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 NRC approved the use of the NAC-MPC System by issuing CoC No. 1025 (effective April 10, 2000) (Reference 6). This constituted NRC approval and the conditions for use in storing spent fuel under the general license provisions of 10 CFR 72.210.

YAEC is a 10 CFR 72 general licensee that utilizes the NAC-MPC System in accordance with the requirements of the NAC-MPC System CoC No. 1025. The regulations require YAEC to comply with the terms and conditions of NAC-MPC CoC No. 1025, including, but not limited to, the associated Technical Specifications.

On January 23, 2002 (effective date November 13, 2001) and May 30, 2002 (effective date May 29, 2002), the NRC issued Amendment Nos. 1 and 2 to CoC No. 1025 for the NAC-MPC System (References 7 and 8). Amendment Nos. 1 and 2 and exemptions from 10 CFR 72.212 and 10 CFR 72.214 granted by the NRC on July 30, 2002 and November 14, 2002 (References 9 and 10) provided the licensing basis for the design, fabrication, loading, and initial spent fuel storage of the NAC-MPC System at YNPS.

Subsequent to the completion of loading and storage of the canisters and casks for the YNPS, on July 28, 2011, YAEC notified the NRC (Reference 2) that the fifteen NAC-MPC canisters and casks storing spent fuel at the YNPS ISFSI would be registered to Amendment No. 5 of NAC-MPC CoC No. 1025 (Reference 11).

3.0 Technical Justification

YAEC's adoption of Amendment No. 8 of CoC No. 1025 by registering the fifteen NAC-MPC canisters storing nuclear fuel to this new amendment with the continuation of two exemptions from the terms and conditions of Amendment No. 8 of CoC No. 1025 that are the same as two previously granted exemptions to Amendment No. 5 of CoC No. 1025 would not result in any impact to the safe storage of the spent fuel at the ISFSI. Fifteen NAC-MPC canisters storing nuclear fuel are already in safe interim storage at YAEC utilizing the approved exemptions under Amendment No. 5 to CoC No. 1025. The continuation of this exemption to permit adoption of Amendment No. 8 to CoC No. 1025 will not increase the probability or consequences of an accident. No new accident precursors are created. No changes are being made in the types or quantities of any radiological effluent that may be released offsite. There is no increase in occupational or public radiation exposure. Therefore, there is no radiological environmental impact associated with the continuation of the exemption.

The NRC previously evaluated the impacts associated with Amendment No. 8 of CoC No. 1025 prior to issuance of the amendment (Reference 1). Thus, its adoption by YAEC will not represent any additional radiological considerations. In addition, the NRC previously granted YAEC the same two exemptions on July 15, 2010 (Reference 3). Thus, the continuation of these specific exemptions is not novel. The NRC previously evaluated the impacts associated with the specific exemptions as follows:

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-MPC system. This

exemption was originally approved by the NRC in its letter to YAEC dated June 6, 2006 (Reference 4), and reapproved by the NRC in its letter to YAEC dated July 15, 2010 (Reference 3).

2. Appendix A, Section A 5.4, Radioactive Effluent Control Program. Exemption from the requirement to submit an annual report pursuant to 10 CFR 72.44(d)(3) or 10 CFR 50.36a(a)(2). This was originally approved by the NRC in its letter to YAEC dated June 6, 2006 (Reference 4), and reapproved by the NRC in its letter to YAEC dated July 15, 2010 (Reference 3).

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:

"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

YAEC has reviewed 10 CFR 72 and determined that an exemption request 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 for the YNPS ISFSI to adopt Amendment No. 8 of CoC No. 1025. If the exemption request is granted, YAEC could proceed with adoption of Amendment No. 8 of CoC No. 1025 with the same two exemptions previously granted to Amendment No. 5 of CoC No. 1025. This would permit the registration of the fifteen NAC-MPC canisters storing nuclear fuel to this new amendment.

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 two exemptions will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the two exemptions would be authorized by law.

5.2 No Undue Risk to Public Health and Safety

Fifteen NAC-MPC canisters storing nuclear fuel are already in safe interim storage at YAEC utilizing the two requested exemptions under Amendment No. 5 to CoC No. 1025. The continuation of these exemptions to permit adoption of Amendment No. 8 to CoC No. 1025 will not increase the probability or consequences of an accident. No new accident precursors are created. No changes are being made in the types or quantities of any radiological effluent that may be released offsite. There is no increase in occupational or public radiation exposure.

Therefore, there is no radiological environmental impact associated with the continuation of the exemption. Consequently, there is no undue risk to public health and safety.

5.3 Consistent with the Common Defense and Security

The YNPS ISFSI will continue to be managed in accordance with the YNPS ISFSI Physical Security Plan, and the outstanding NRC Orders and Interim Compensatory Measures and associated YAEC 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 exemptions do 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 YNPS ISFSI.

The proposed exemptions 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, training requirements, or reporting 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

YAEC has reviewed 10 CFR 72 and determined that two exemptions 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 allow the YNPS ISFSI to adopt Amendment No. 8 of NAC-MPC CoC No. 1025 by registering the fifteen NAC-MPC canisters storing nuclear fuel to this new amendment.

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

8.0 Precedent

On July 15, 2010 (Reference 3) and February 18, 2016 (Reference 5), the NRC granted YAEC exemptions from certain sections of 10 CFR 72.212 and 10 CFR 72.214 regarding the NAC-MPC CoC and its Technical Specifications that establish that this type of exemption request is not a novel approach.

9.0 References

1. J. McKirgan (NRC) letter to W. Fowler (NAC) International, Amendment Nos. 7 and 8 to Certificate of Compliance No. 1025 for the NAC-MPC Storage System, dated February 5, 2019 (effective date March 4, 2019) (Accession No. ML19038A256)
2. Letter from R. Mitchell (YAEC) to Document Control Desk (NRC), "Yankee Atomic Electric Company Adoption of NAC-MPC® System Amendment 5 Certificate of Compliance and Canister Registration," dated July 28, 2011 (BYR 2011-018) (Accession No. ML11216A137)
3. Letter from J. Goshen (NRC) to R. Mitchell (YAEC), "Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities - Yankee Atomic Independent Spent Fuel Storage Installation (TAC No. L24421)," dated July 15, 2010 (Accession No. ML102020239)
4. W. Ruland (NRC) letter to A. Carson (YAEC), "Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities (TAC No. L23937)," dated June 6, 2006 (Accession No. ML061570027)
5. Letter from J. Goshen (NRC) to B. Smith (YAEC), "Issuance of Exemption from NAC International Certificate of Compliance No. 1025 Fuel Specification and Loading Conditions at the Yankee Nuclear Power Station Independent Spent Fuel Storage Installation (TAC L25051)," dated February 18, 2016, with an effective date of February 10, 2016 (Accession No. ML16033A150)
6. W. Brach (NRC) letter to T. Thompson (NAC International, Inc.), "Certificate of Compliance for the NAC International, Inc., Multi-Purpose Canister (MPC) System, (TAC No. 22907)," dated March 17, 2000 (effective date April 10, 2000) (Accession No. ML003704040)
7. W. Brach (NRC) letter to T. Thompson (NAC International, Inc.), "Amendment No. 1 (Incorporation of Changes for Yankee Nuclear Power Station Spent Fuel) to Certificate of Compliance No. 1025 for the NAC Multi-Purpose Canister (NAC-MPC) (TAC No.

L23213),” dated January 23, 2002 (effective date November 13, 2001) (Accession No. ML020250509)

8. W. Brach (NRC) letter to T. Thompson (NAC International, Inc.), “Certificate of Compliance No. 1025, Amendment 2,” dated May 30, 2002 (effective date May 29, 2002) (Accession No. ML021420144)
9. W. Brach (NRC) letter to K. Heider (YAEC), “Exemption from 10 CFR 72.212 and 72.214, Docket No. 72.31 to Support the Fuel Loading Campaign at Yankee Nuclear Power Station (YNPS) (TAC No. L23466),” dated July 30, 2002 (Accession No. ML022110443)
10. C. Miller (NRC) letter to K. Heider (YAEC), “Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities,” dated November 14, 2002 (Accession No. ML023190235)
11. R. Nelson (NRC) letter to A. Patko (NAC International, Inc.), “Amendment No. 5 to Certificate of Compliance No. 1025 for the NAC International, Inc. Multi-Purpose Canister (MPC) System,” dated September 19, 2007 (effective date July 24, 2007) (Accession No. ML072700041)