



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT  
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April 24, 2019  
CY-19-008  
10 CFR 72.4 and 10 CFR 72.7

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

72-039  
72-1025

Connecticut Yankee Atomic Power Company  
Haddam Neck Plant Independent Spent Fuel Storage Installation  
NRC License No. DPR-61 (NRC Docket No. 50-213)

Subject: Request for Exemption from Certain Requirements of 10 CFR 72.212 and 10 CFR 72.214 for the Haddam Neck Plant Independent Spent Fuel Storage Installation

Pursuant to 10 CFR 72.7, "Specific exemptions," Connecticut Yankee Atomic Power Company (CYAPCO) 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 Haddam Neck Plant (HNP) Independent Spent Fuel Storage Installation (ISFSI). On February 5, 2019, the 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, CYAPCO's forty 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 forty NAC-MPC canisters storing nuclear fuel to this new amendment, CYAPCO is requesting the continuation of an exemption from the terms and conditions of Amendment No. 8 of CoC No. 1025 that is the same as a previously granted exemption 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 (860) 267-6426 ext. 303.

Respectfully,

Bob Mitchell  
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 J. Lenois (CYAPCO) to Document Control Desk (NRC), "Connecticut Yankee Atomic Power Company Adoption of NAC-MPC® System Amendment 5 Certificate of Compliance and Canister Registration," dated November 29, 2011 (CY-11-040) (Accession No. ML11348A106)
  3. Letter from J. Goshen (NRC) to J. Lenois (CYAPCO), "Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities - Haddam Neck Plant Independent Spent Fuel Storage Installation (TAC NO. L24373)," dated July 15, 2010 (Accession No. ML101960618)
- cc: D. Lew, NRC Region I Administrator  
R. Powell, Chief, Decommissioning Branch, NRC, Region 1  
J. Nguyen, NRC Project Manager, Haddam Neck Plant  
J. Semancik, Director, CT DEEP, Radiation Division

## Attachment 1 to CY-19-008

### Request for Exemption from Certain Requirements of 10 CFR 72.212 and 10 CFR 72.214 for the Connecticut Yankee Independent Spent Fuel Storage Installation

#### 1.0 Request for Exemption

Pursuant to 10 CFR 72.7, "Specific exemptions," Connecticut Yankee Atomic Power Company (CYAPCO) 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 Haddam Neck Plant (HNP) 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, CYAPCO's forty 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 forty NAC-MPC canisters storing nuclear fuel to this new amendment, CYAPCO is requesting the continuation of an exemption from the terms and conditions of Amendment No. 8 of CoC No. 1025 that is the same as a previously granted exemption to Amendment No. 5 of CoC No. 1025 (Reference 3). This exemption is:

- 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 CYAPCO dated September 22, 2005 (Reference 4), and reapproved by the NRC in its letter to CYAPCO dated July 15, 2010 (Reference 3).

On February 18, 2016 (Reference 5), the NRC granted CYAPCO 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 CYAPCO's adoption of Amendment No. 8 of NAC-MPC CoC No. 1025, because TS A 5.3 is eliminated in the amendment. Thus, CYAPCO 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.

CYAPCO 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

CYAPCO to comply with the terms and conditions of NAC-MPC CoC No. 1025, including, but not limited to, the associated Technical Specifications.

On October 8, 2003 (effective date October 1, 2003) and October 27, 2004 (effective date October 27, 2004), the NRC issued Amendments No. 3 and 4 to CoC No. 1025 for the NAC-MPC System (References 7 and 8). These amendments provided the licensing basis for the design, fabrication and initial spent fuel storage of the NAC-MPC System at HNP. CYAPCO utilized the NAC-MPC System as defined in Amendments No. 3 and 4 to load and store the spent fuel into the NAC-MPC canisters and casks.

Subsequent to the completion of loading and storage of the canisters and casks for the HNP, on November 29, 2011, CYAPCO notified the NRC (Reference 2) that the forty NAC-MPC canisters and casks storing spent fuel at the HNP ISFSI would be registered to Amendment No. 5 of NAC-MPC CoC No. 1025 (Reference 9).

### 3.0 Technical Justification

CYAPCO's adoption of Amendment No. 8 of CoC No. 1025 by registering the forty NAC-MPC canisters storing nuclear fuel to this new amendment with the continuation of an exemption from the terms and conditions of Amendment No. 8 of CoC No. 1025 that is the same as a previously granted exemption 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. Forty NAC-MPC canisters storing nuclear fuel are already in safe interim storage at CYAPCO utilizing the approved exemption 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 CYAPCO will not represent any additional radiological considerations. In addition, the NRC previously granted CYAPCO the same exemption on July 15, 2010 (Reference 3). Thus, the continuation of this specific exemption is not novel. The NRC previously evaluated the impacts associated with the specific exemption as follows:

- Appendix A, Section A 5.1, Training Program. Exemption from the requirement to develop a 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 CYAPCO dated September 22, 2005 (Reference 4), and reapproved by the NRC in its letter to CYAPCO 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

CYAPCO 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 HNP ISFSI to adopt Amendment No. 8 of CoC No. 1025. If the exemption request is granted, CYAPCO could proceed with adoption of Amendment No. 8 of CoC No. 1025 with the same exemption previously granted to Amendment No. 5 of CoC No. 1025. This would permit the registration of the forty 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 exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption would be authorized by law.

##### 5.2 No Undue Risk to Public Health and Safety

Forty NAC-MPC canisters storing nuclear fuel are already in safe interim storage at CYAPCO utilizing the requested exemption 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. Consequently, there is no undue risk to public health and safety.

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

The HNP ISFSI will continue to be managed in accordance with the HNP ISFSI Physical Security Plan, and the outstanding NRC Orders and Interim Compensatory Measures and associated CYAPCO responses. The proposed exemption 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 HNP 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, 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

CYAPCO 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 allow the HNP ISFSI to adopt Amendment No. 8 of NAC-MPC CoC No. 1025 by registering the forty NAC-MPC canisters storing nuclear fuel to this new amendment.

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).

## 8.0 Precedent

On July 15, 2010 (Reference 3) and February 18, 2016 (Reference 5), the NRC granted CYAPCO 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. J. Lenois (CYAPCO) letter to Document Control Desk (NRC), "Connecticut Yankee Atomic Power Company Adoption of NAC-MPC® System Amendment 5 Certificate of Compliance and Canister Registration," dated November 29, 2011 (CY-11-040) (Accession No. ML11348A106)
3. Letter from J. Goshen (NRC) to J. Lenois (CYAPCO), "Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities - Haddam Neck Plant Independent Spent Fuel Storage Installation (TAC NO. L24373)," dated July 15, 2010 (Accession No. ML101960618)
4. W. Ruland (NRC) letter to J. Bourassa (CYAPCO), "Exemption from 10 CFR 72.212 and 72.214 for Dry Spent Fuel Storage Activities - Haddam Neck Plant (TAC No. L23859)." dated September 22, 2005 (Accession No. ML052660399)
5. Letter from J. Goshen (NRC) to R. Mitchell (CYAPCO), "Issuance of Exemption from NAC International Certificate of Compliance No. 1025 Fuel Specification and Loading Conditions at the Haddam Neck Power Station Independent Spent Fuel Storage Installation (TAC L25052)," dated February 18, 2016, with an effective date of February 10, 2016 (Accession No. ML16055A161)
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. J. Monninger (NRC) letter to T. Thompson (NAC International, Inc.), "Amendment No. 3 (Connecticut Yankee Fuel) to Certificate of Compliance No. 1025 for the NAC International, Inc. Multi-Purpose Canister (NAC-MPC) System," dated October 8, 2003 (effective date October 1, 2003) (Accession No. ML032820200)
8. J. Monninger (NRC) letter to T. Thompson (NAC International, Inc.), "Amendment No. 4 to Certificate of Compliance No. 1025 for the NAC International, Inc. Multi-Purpose Canister (NAC-MPC) System," dated October 27, 2004 (effective date October 27, 2004) (Accession No. ML04302022)
9. 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)