



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 24, 2002

Mr. K. J. Heider
Vice President
Yankee Atomic Electric Company
19 Midstate Drive, Suite 200
Auburn, MA 01501

SUBJECT: FEDERAL REGISTER NOTICE PUBLISHING AN ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR A REQUEST FOR AN EXEMPTION FROM 10 CFR 72.212 AND 72.214, DOCKET NO. 72-31 (TAC NO. L23466)

Dear Mr. Heider:

In accordance with Yankee Atomic Electric Company's (YAEC) exemption request dated May 10, 2002, and pursuant to 10 CFR 51.35, the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Material Safety and Safeguards, Spent Fuel Project Office, has issued an Environmental Assessment and Finding of No Significant Impact. The requested exemption would modify the specified fuel enrichment parameters to incorporate fuel enrichment fabrication tolerances into the Yankee-Class fuel parameters which would allow YAEC to maintain continuity of the fuel loading campaign at Yankee Rowe Nuclear Power Station.

NRC will notify you in a timely manner of our decision on this exemption request. Enclosed is a copy of the Federal Register Notice.

Sincerely,

/RA/

E. William Brach, Director
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket Nos.: 72-31, 72-1025, and 50-029

Enclosure: Federal Register Notice

cc: Mr. Russell A. Mellor, President
YAEC Service List

Mr. K. J. Heider
Vice President
Yankee Atomic Electric Company
19 Midstate Drive, Suite 200
Auburn, MA 01501

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*(Original Signed by
M. Wayne Hodges for:)*

E. William Brach, Director
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*see previous concurrence

U.S. NUCLEAR REGULATORY COMMISSION
DOCKET NO. 72-31
YANKEE ATOMIC ELECTRIC COMPANY
ISSUANCE OF ENVIRONMENTAL ASSESSMENT
AND FINDING OF NO SIGNIFICANT IMPACT FOR THE PROPOSED EXEMPTION

The U.S. Nuclear Regulatory Commission (NRC or Commission) is considering issuance of an exemption, pursuant to 10 CFR 72.7, from the provisions of 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), and 72.214 to the Yankee Atomic Electric Company (YAEC). The requested exemption would allow YAEC to deviate from the requirements of Certificate of Compliance No. 1025 (the Certificate), Appendix A, Technical Specifications (TS), Table A2-2, Intact Fuel Assembly Characteristics for the NAC-MPC. The exemption would modify the specified fuel enrichment parameters to incorporate fuel enrichment fabrication tolerances into the Yankee-Class fuel parameters which would allow YAEC to maintain continuity of the fuel loading campaign at Yankee Nuclear Power Station (YNPS) in Rowe, Massachusetts.

ENVIRONMENTAL ASSESSMENT (EA)

Identification of Proposed Action: By letter dated May 10, 2002, YAEC requested an exemption from the requirements of 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), and 72.214 to deviate from the requirements of Certificate of Compliance No. 1025, Appendix A, Table A-2-2.

YAEC is a general licensee, authorized by NRC to use spent fuel storage casks approved under 10 CFR Part 72, Subpart K.

YAEC plans to use the NAC-MPC cask system to store spent nuclear fuel, generated at YNPS, at an independent spent fuel storage installation (ISFSI) located in Rowe, Massachusetts, on the YNPS site. The YNPS ISFSI has been constructed for interim dry storage of spent nuclear fuel.

By exempting YAEC from 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), and 72.214, YAEC will be authorized to store fuel with enrichments 0.03 wt% U-235 larger than those enrichments specified in the existing technical specifications for Yankee-Class fuel. The revised fuel enrichment parameters for the Yankee-Class fuel are as follows (all enrichments are in wt % of U-235):

Combustion Engineering Type A	Maximum-	3.93	Minimum-	3.66
Combustion Engineering Type B	Maximum-	3.93	Minimum-	3.66
Exxon Type A	Maximum-	4.03	Minimum-	3.46
Exxon Type B	Maximum-	4.03	Minimum-	3.46
Westinghouse Type A	Maximum-	4.97	Minimum-	4.90
Westinghouse Type B	Maximum-	4.97	Minimum-	4.90
United Nuclear Type A	Maximum-	4.03	Minimum-	3.96
United Nuclear Type B	Maximum-	4.03	Minimum-	3.96

The specifications above would be in lieu of those in the current Certificate of Compliance No. 1025, Rev. 1, Appendix A, Table A2-2. The proposed action before the Commission is whether to grant this exemption under 10 CFR 72.7.

On April 18, 2002, the Certificate holder, NAC International (NAC), submitted to the NRC an application to amend Certificate of Compliance No. 1025. The requested amendment

includes the same revisions to Table A2-2 in Appendix A to the Certificate as requested in this exemption. The NRC staff has reviewed the application and agreed with the applicant's conclusion that the NAC-MPC system is not significantly affected by increasing the enrichment by 0.03 wt % above the previous design basis enrichment and does not impact the ability of the NAC-MPC to meet the requirements of 10 CFR Part 72.

Need for the Proposed Action: The revised Table A2-2 will authorize for storage, fuel with enrichments that incorporate enrichment fabrication tolerances for the Yankee-Class fuel. This will allow YAEC to maintain continuity of fuel loading activities to permit inspection of the fuel assemblies in the lower tier of the spent fuel pool. The exemption will also support YAEC's goal of a timely decommissioning of the YNPS site. The overall result of not granting the exemption would be unnecessary delays in schedule and delayed completion of decommissioning activities with negligible impact on safety. Because the 10 CFR Part 72 rulemaking to amend the Certificate will not be completed prior to the date that YNPS plans to begin loading fuel into the NAC-MPC cask systems, the NRC is proposing to grant this exemption based on the staff's technical review of information submitted by YAEC and NAC.

Environmental Impacts of the Proposed Action: The Commission has already determined that spent fuel can be stored safely and without significant environmental impact at an onsite ISFSI in the NAC-MPC cask system (65 FR 12444, dated March 9, 2000). Staff's review of NAC's application for an amendment of its Certificate confirmed that changes in fuel parameters to take into account fabrication tolerances for enrichment will not increase the probability or consequences of accidents. No changes have been requested to the types or quantities of any radiological effluents that may be released offsite, and there is no significant

increase in occupational or public radiation exposure. There are no significant radiological environmental impacts associated with the proposed action.

Alternative to the Proposed Action: Since there is no significant environmental impact associated with the proposed action, alternatives with equal or greater environmental impact are not evaluated. The alternative to the proposed action would be to deny approval of the exemption and use the fuel assembly parameters table in the current Certificate. Denial of the exemption will result in unnecessary delays in schedules and delayed completion of decommissioning activities. With the proposed actions, the applicant continues to meet all applicable safety requirements.

Agencies and Persons Consulted: On July 9, 2002, Mr. Jim Muckerhide, Nuclear Engineer, Nuclear Safety, Massachusetts Emergency Management Agency was contacted about the Environmental Assessment for the proposed action and had no comments.

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 EA, the Commission finds that the proposed action of granting an exemption from 10 CFR 72.212(a)(2), 72.212(b)(2)(i)(A), and 72.214 allowing YAEC to use revised intact fuel enrichment parameters in Table A2-2 at YNPS ISFSI will not significantly impact the quality of the human environment. Accordingly, the Commission has determined that an environmental impact statement for the proposed exemption is not warranted.

The request for the exemption was docketed under 10 CFR Part 71, Docket 72-31. For further details with respect to this action, see the exemption request dated May 10, 2002. The NRC maintains an Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents. These documents may be accessed through the NRC's Public Electronic Reading Room on the Internet at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by e-mail to pdr@nrc.gov.

Dated at Rockville, Maryland this 24th day of July 2002.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

M. Wayne Hodges, Acting Director
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

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Yankee Nuclear Power Station

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