



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 22, 1999

Dr. Stephen Brocoum
Assistant Manager for Licensing
U.S. Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
P.O. Box 30307
North Las Vegas, Nevada 89036-0307

SUBJECT: NAVAL NUCLEAR PROPULSION PROGRAM ADDENDUM TO THE DISPOSAL CRITICALITY ANALYSIS METHODOLOGY TOPICAL REPORT

In your letter dated October 21, 1999, you informed us about the Naval Nuclear Propulsion Program (NNPP) transmitting the naval addendum to the Disposal Criticality Analysis Methodology Topical Report. You stated that you have reviewed and concurred with the naval addendum.

After receiving the NNPP's addendum through a letter dated October 29, 1999, the U.S. Nuclear Regulatory Commission (NRC) staff commenced a 30-day review using the criteria described in the Topical Report Review Plan to determine whether or not the addendum can be accepted for detailed technical review. In its addendum, the NNPP has included 11 specific items for which NRC acceptance is requested. Subsequent meetings between the NRC, the U.S. Department of Energy (DOE), and the NNPP staff on November 18, 1999, and December 3, 1999, resulted in modifications/clarifications of some of the 11 items. The modifications/clarifications brought the scope of the requests in line with the current status of the waste package design and the site characterization program. The revisions to some of the 11 specific requests were submitted to the NRC by the NNPP in a letter dated December 7, 1999.

Based on the materials presented in the October 29, 1999 addendum and the December 7, 1999 transmittal, the staff considers that the addendum satisfies all four criteria for the NRC acceptance of a topical report described in the Topical Report Review Plan. The staff believes that the disposal criticality is an important-to-waste-isolation issue, and the approach/methodology employed by the NNPP for addressing disposal criticality for the Navy spent fuel requires NRC staff to do a safety assessment by the staff, which can be evaluated independent of the license application. The staff also concludes that the subject addendum satisfies the qualification criteria for a topical report and is sufficiently complete for the staff to initiate its technical review. Lastly, the NRC's acceptance of the methodology and the approach described in the addendum will result in increased efficiency of the review process for the license application.

With the initiation of the detailed technical review, the staff anticipates that additional information or clarifications may be needed for the staff to complete its safety evaluation. The staff will make such a request, as necessary.

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We look forward to working with your staff and NNPP staff during the course of the topical report review. In this regard, enclosed is a schedule which includes anticipated meetings between our staffs and the milestones in issuing the Safety Evaluation Report. If you have any questions regarding the letter or the staff's review, please contact me at (301) 415-6537 or Meraj Rahimi of my staff at (301) 415-6616.

Sincerely,

A handwritten signature in black ink, appearing to read "C. William Reamer". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

C. William Reamer, Chief
High-Level Waste and Performance
Assessment Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards

Enclosure: Review Schedule

cc: See attached distribution list

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Sincerely,

[Original signed by:]

C. William Reamer, Chief
 High-Level Waste and Performance
 Assessment Branch
 Division of Waste Management
 Office of Nuclear Material Safety and Safeguards

Enclosure: Review Schedule

cc: See attached distribution list

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Letter to S. Brocoum from C. W. Reamer dated: December 22, 1999

cc G.E. Mowbray, NNPP
E. Naples, NNPP
Carl Detrick, Bettis Atomic Power Laboratory
Don Dei, Bettis Atomic Power Laboratory
R. Loux, State of Nevada
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J. Meder, Nevada Legislative Counsel Bureau
D. Bechtel, Clark County, NV
E. von Tiesenhausen, Clark County, NV
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M. Murphy, Nye County, NV
J. McKnight, Nye County, NV
N. Stellavato, Nye County, NV
D. Kolkman, White Pine County, NV
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W. Barnard, NWTRB
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D. Morgan, NIEC
R. Arnold, Pahrump County, NV
J. Lyznicky, AMA
R. Clark, EPA
F. Marcinowski, EPA
R. Anderson, NEI
R. McCullum, NEI
S. Kraft, NEI

J. Kessler, EPRI
G. McKnight, Pahrump, NV
R. Wallace, USGS
R. Craig, USGS
W. Booth, Engineering Svcs, LTD
S. Trubatch, Winston & Strawn

**Review Schedule for U.S. Navy's Addendum
to Disposal Criticality Analysis Methodology Topical Report**

NRC Receives Navy's Addendum to Topical Report	11/2/99
NRC Completes Acceptance Review	12/23/99
First Technical Exchange with Navy (Materials & FEPS)	1/5/2000
Second Technical Exchange with Navy (Neutronics)	2/8/2000
NRC Issues Request for Additional Information (RAI)	4/2/2000
Navy Provides Responses to RAI	6/2/2000
Staff Completes Review	7/15/2000
Issue Draft Safety Evaluation Report (SER)	8/15/2000
Hold Third Technical Exchange (Draft SER)	9/15/2000
Issue Final SER	10/15/2000

Enclosure