

November 18, 1999

Mr. Andre Cygleman
U.S. Department of Energy
1000 Independence Avenue
Rm 6G050
Mail Stop MD 3
Washington, DC 20585

SUBJECT: INDEPENDENT REVIEW AND ASSESSMENT OF THE MIXED OXIDE FUEL
FABRICATION FACILITY TITLE I/II DESIGN PROJECT #(99-D-143)

Dear Mr. Cygleman:

The purpose of this correspondence is to communicate U.S. Nuclear Regulatory Commission (NRC) staff comments on the subject report. During a July 23, 1999, meeting with your contractor, Jupiter Corporation, we were advised that there would be an opportunity to review the report to ascertain whether NRC input was appropriately reflected. It was made clear at the time that the report likely would not be revised, but NRC comments could be appended. Overall, we have concluded that NRC input was adequately represented; however, we do have a few minor clarifications that are documented in the enclosed.

We appreciate having had the opportunity to review the report and trust that our comments will contribute to its completeness and accuracy.

Sincerely,

Original signed by: LRoche for

Theodore S. Sherr, Chief
Licensing and International
Safeguards Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Enclosure: As stated

cc w/encl: Mr. David Treacy
Office of the Chief Financial Officer
U.S. Department of Energy
1000 Independence Avenue
Rm 4A162
Washington, DC 20585

Mr. Marty Martinez Jr.
Suite 900, Wheaton Plaza North
2730 University Boulevard West
Wheaton, MD 20902

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in dark ink, appearing to read "Theodore S. Sherr", is written over the typed name.

Theodore S. Sherr, Chief
Licensing and International
Safeguards Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Enclosure: As stated

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COMMENTS ON JUPITER REPORT RE MOX FUEL

FSPB

Executive Summary, Paragraph 8

JUPITER references an NRC requirement for data to support the license application prior to loading MOX fuel assemblies into U.S. commercial light water reactors. JUPITER should either clarify or cite the exact requirement.

Executive Summary, Paragraph 10

JUPITER correctly states that if Duke Cogema Stone & Webster (DCS) submits the Final Surplus Plutonium Disposition Environmental Impact Statement (Final SPD EIS) as its environmental report (ER), the NRC will review the Final SPD EIS. This review will determine if DCS must supply additional information to support the NRC's National Environmental Policy Act (NEPA) analysis. To ensure an independent review, to avoid any conflict of interest, and to avoid any suggestion that the NRC reached a conclusion under NEPA before the initiation of the licensing action, the NRC has no comment on the Final SPD EIS at this time.

Section 2.1.2, "Design Adequacy"

JUPITER provides examples where DCS may need to adapt the design used at the French Melox plant to meet U.S. codes and standards. One example is the use of polycarbonate glove-boxes, currently in use at Melox; JUPITER states that combustible glove-boxes would not be acceptable in a U.S. plutonium production facility. JUPITER should clarify the requirements and/or standards used to draw this conclusion.

Section 2.2.1, "Licensing and Interactions with Regulatory and Oversight Agencies"

The NRC would like to note that a draft of the Standard Review Plan to license the mixed-oxide (MOX) fuel fabrication facility will be publicly available in January 2000.

Section 2.2.7, "Transportation Interface"

LANL is listed as the preferred site for the MOX fuel fabrication facility. The NRC believes that this should be listed as the Savannah River Site.

Section 2.2.7, "Transportation Interface"

JUPITER indicates that the Defense Nuclear Facilities Safety Board (DNFSB) will play a role in coordinating the transportation of feed material to the MOX fuel fabrication facility and of MOX fuel to the reactors. The jurisdiction of the DNFSB over transportation should be clarified, and if the DNFSB has jurisdiction over transportation then the role of the DNFSB should be clarified.

OGC

Role of Defense Nuclear Safety Board

The role, if any, of the Defense Nuclear Safety Board should be clarified.

NRR

Use of European MOX data

The European MOX data will be reviewed only if it is offered as a technical basis for MOX utilization.