

September 30, 2008

MEMORANDUM TO: Margie Kotzalas, Chief  
MOX Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

FROM: David Tiktinsky, Sr. Project Manager **/RA/**  
MOX Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: SUMMARY OF THE CLOSED MEETING WITH SHAW AREVA MOX  
SERVICES TO DISCUSS DRAFT RESPONSES TO REQUESTS FOR  
ADDITIONAL INFORMATION RELATED TO CRITICALITY SAFETY  
FOR THE MIXED OXIDE FUEL FABRICATION FACILITY TO BE  
BUILT NEAR AIKEN, SOUTH CAROLINA

On July 17, 2008, Nuclear Regulatory Commission staff met with representatives from Shaw AREVA MOX Services to discuss their draft responses to the staff's requests for additional information related to the criticality safety portion of the review of the license application to possess and use special nuclear material for the Mixed Oxide Fuel Fabrication Facility.

Please see the enclosed meeting summary for more details (Enclosure 1). The meeting attendance list is also enclosed (Enclosure 2). The summary does not contain any official use only material.

Enclosures:

1. Meeting Summary
2. Meeting Attendance List

cc: w/o enclosures

G. Smith, NNSA  
J. Olencz, NNSA  
S. Jenkins, SC Dept. of HEC  
D. Silverman, Esq., MOX Services  
D. Gwyn, MOX Services

A.J. Eggenberger, DNFSB  
L. Zeller, BREDL  
G. Carroll, Nuclear Watch South  
D. Curran, Esq., Nuclear Watch South

CONTACT: David Tiktinsky, NMSS/FCSS  
(301) 492-3229

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SUBJECT: SUMMARY OF THE CLOSED MEETING WITH SHAW AREVA MOX SERVICES TO DISCUSS DRAFT RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION RELATED TO CRITICALITY SAFETY FOR THE MIXED OXIDE FUEL FABRICATION FACILITY TO BE BUILT NEAR AIKEN, SOUTH CAROLINA

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|--------|------------|---------|---------|-----------|
| OFFICE | MB         | MB      | ECB     | MB        |
| NAME   | DTiktinsky | CGibbs  | CTripp  | MKotzalas |
| DATE   | 9/18/08    | 8/18/08 | 8/18/08 | 9/30/08   |

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**SUMMARY OF THE MEETING WITH MOX SERVICES RELATED TO THE DISCUSSION OF DRAFT RESPONSES TO THE STAFF'S RAIS ON CRITICALITY SAFETY FOR THE MIXED OXIDE FUEL FABRICATION FACILITY**

DATE                      July 17, 2008

PLACE                     Rockville, MD

ATTENDEES             See Enclosure 2

PURPOSE

This purpose of the meeting was for U.S. Nuclear Regulatory Commission (NRC) staff to present and discuss with Shaw AREVA MOX Services (MOX Services or applicant) personnel the draft responses to the staff's requests for additional information (RAI) in the criticality safety area related to the technical review of the license application (LA) to possess and use radioactive material and the Integrated Safety Analysis (ISA) Summary for the Mixed Oxide Fuel Fabrication Facility.

DISCUSSION

In order to facilitate communication between the applicant and the staff and to assure an understanding of the RAIs, a meeting was held to discuss the applicant's draft response to the staff's RAIs. The staff's intent for these types of meetings is to try to assure a complete understanding of how the applicant plans to respond to the RAIs. This should lead to minimizing rounds of RAIs and facilitate the completion of the staff's technical review.

The staff's RAIs are related to criticality safety aspects of the technical review of the LA. The draft RAIs covered a wide range of nuclear criticality safety (NCS) related items including: (a) organization and administration for nuclear criticality safety; (b) NCS audits and assessments; (c) criticality safety procedures; (d) nuclear incident monitoring system; (e) nuclear criticality safety evaluations; (f) analytical methodology; (g) criticality control modes; (h) geometry control; (i) mass control; (j) isotopic control; (k) reflection control; (l) moderation control; (m) concentration control; (n) interaction control; (o) volume control; (p) heterogeneity, physiochemical, and process variable control; (q) regulatory requirements, guidance, and industry standards; (r) criticality code validation methodology; (s) subcriticality limits; (t) implementation of nuclear criticality safety in the ISA; and (u) regulatory guidance applicability.

The applicant has formally responded to the RAIs and the responses can be found in ML082390319, dated August 22, 2008, in the NRC's Agencywide Documents Access and Management System document system.

No regulatory decisions were made at the meeting.

The meeting was then adjourned.

**July 17, 2008 Criticality Safety Draft RAI Responses Meeting Attendance List**

|                     |              |
|---------------------|--------------|
| David Tiktinsky     | NRC          |
| Kevin Morrissey     | NRC          |
| Craig Hrabal        | NRC          |
| Chris Tripp         | NRC          |
| Jonathon DeJesus    | NRC          |
| Soly Soto           | NRC          |
| Maria Guardiola     | NRC          |
| Cintha Roman Cuevas | NRC          |
| Christian Farmer    | NRC          |
| Michael Shea        | MOX Services |
| Fredrick Willis     | MOX Services |
| Wesley Dotson       | MOX Services |
| Robert Foster       | MOX Services |
| Bill Hennessy       | MOX Services |
| Dealis Gwyn         | MOX Services |
| Garrett Smith       | DOE/ NNSA    |