September 8, 2015

Mr. Dealis W. Gwyn
Licensing Manager
CB&I AREVA MOX Services
P.O. Box 7097
Aiken, SC 29804-7097

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION REQUEST FOR ADDITIONAL INFORMATION RELATED TO AMENDMENT MPQAP-2015-0002 OF THE "MIXED OXIDE PROJECT QUALITY ASSURANCE PLAN" FOR THE MIXED OXIDE FUEL FABRICATION FACILITY

Dear Mr. Gwyn:

On May 11, 2015, CB&I AREVA MOX Services (MOX Services) submitted Amendment Number: MPQAP-2015-0002 of the MOX Project Quality Assurance Plan (MPQAP) for review and approval. MPQAP-2015-0002 requested changes to supplier submittal requirements for Underwriters Laboratory or Factory Mutual QL-1LR items.

In order to complete the review the staff needs additional information as shown in the enclosure to this letter. Please provide responses to these information requests in the form of MPQAP change pages and provide a description of the changes made.

In accordance with Title 10 of the *Code of Federal Regulations* Section 2.390 of the U.S. Nuclear Regulatory Commission's (NRC) "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at: http://www.nrc.gov/reading-rm/adams.html.

If you have any questions, please contact me at (301) 415-8740, or via e-mail to David.Tiktinsky@nrc.gov.

Sincerely,

/RA/

David Tiktinsky, Senior Project Manager
Fuel Manufacturing Branch
Division of Fuel Cycle Safety, Safeguards,
and Environmental Review
Office of Nuclear Material Safety
and Safeguards

Docket No.: 70-3098

Enclosure:

Request for Additional Information

cc: See next page

If you have any questions, please contact me at (301) 415-8740, or via e-mail to David.Tiktinsky@nrc.gov.

Sincerely,

David Tiktinsky, Senior Project Manager
Fuel Manufacturing Branch
Division of Fuel Cycle Safety, Safeguards,
and Environmental Review
Office of Nuclear Material Safety
and Safeguards

Docket No.: 70-3098

Enclosure:

Request for Additional Information

cc: See next page

ML15232A112

OFFICE	FCSE/FMB	FCSE/FMB	FCSE/PORB	FSCE/FMB
NAME	DTiktinsky	TBrockington	TMatula	RJohnson
DATE	8/20/15	8/28/15	9/8/15	9/8/15

OFFICIAL RECORD COPY

REQUEST FOR ADDITONAL INFORMATION
AMENDMENT NUMBER: 2015-002 OF THE MIXED OXIDE
PROJECT QUALITY ASSURANCE PLAN

1. The current version of Attachment B, Section 4.1 of the MOX Project Quality Assurance Plan (MPQAP) states that the supplier shall submit the Underwriters Laboratory (UL) or Factory Mutual (FM) qualification report for the item to be procured, the UL or FM process evaluations report for the supplier, the supplier's quality assurance (QA) manual, and the supplier's UL or FM accreditation certificate. However, the proposed amendment Attachment B, Section 4.1 states that the supplier shall submit the UL or FM qualification report for the item to be procured and the supplier's UL or FM accreditation certificate.

    a. What is the technical justification for not requiring the UL or FM process evaluations reports for suppliers and the supplier's QA manual for the item to be procured?

    b. If the supplier's process evaluation report and QA manual are not received, how does MOX Services verify the acceptability of the supplier during the purchase requisition/bid evaluation phase?

2. In the justification for the proposed amendment, MOX Services stated that both UL and FM perform follow-up surveillance audits after the initial certification or approval process.

    a. What is the scope, frequency, and acceptance criteria for UL or FM periodic inspections of UL or FM certified/approved manufacturers to determine the manufacturer's continued compliance to requirements and design features?

    b. What oversight does MOX Services perform regarding UL and FM periodic inspections of UL or FM certified/approved manufacturers?

3. In the justification for the proposed amendment, MOX Services states that EPRI NP-5652, Method 4, Item/Supplier Performance Record, discusses allowing the purchaser to accept commercial grade items based on confidence in the supplied item through proven performance of the item. MOX Services also states that it committed to monitor both UL and FM on a quarterly basis and review recalls from both of these organizations in order to continuously monitor products for quality issues. EPRI NP-5652, Method 4 states that a documented item or supplier performance record is a method of acceptance that may be used under certain stipulations to verify acceptability of one or more of the identified critical characteristics of a commercial-grade item or service. As stated in NRC Generic Letter 89-02, Method 4 should not be employed alone unless the established historical record is based on industry-wide performance data that is directly applicable to the item's critical characteristics and the intended safety-related application.

    a. How does monitoring UL and FM recalls on a quarterly basis to monitor products for quality issues establish an effective item performance record, provide assurance that critical characteristics have been met, and assure that the intended safety-related application will be satisfied?

4. The current version of Attachment B, Section 4.1 of the MPQAP states that the accreditation organizations test/qualification report for the item to be procured in conjunction with normal construction/preoperational/start-up testing is reviewed by MOX Services and has been determined to be sufficient to demonstrate that the item will perform its safety function. However, in the proposed amendment MOX Services deleted the word "test" from "the accreditation organizations test/qualification report."

    a. What is the technical justification for deleting the requirement for the test report?

5. In Attachment B, Section 4.1 of the proposed amendment, MOX Services deleted the statement that the accreditation organizations evaluation of the technical and quality capability of the suppliers' process controls is reviewed by MOX Services and has been determined to be sufficient to provide reasonable assurance that the manufactured items are representative of the item tested.

    a. What is the technical justification for deleting the requirement for the MOX Services review of the accreditation organizations evaluation of the technical and quality capability of the suppliers' process controls?

6. In Attachment B, Section 4.1 of the proposed amendment, MOX Services states that the accreditation organizations qualification report for the item to be procured in conjunction with normal construction/preoperational/start-up testing is reviewed by MOX Services and has been determined to be sufficient to demonstrate that the item will perform its safety function. Following this section, MOX Services added the following note: If UL or FM approves an item to a standard and engineering determines that meeting that standard meets the needed safety requirements, then the UL or FM report is no longer required.

    a. Provide a description of how MOX Services engineering performs its review and documents its determination, and where the records are maintained, of whether the UL or FM accreditation qualification report for the item to be procured, in conjunction with normal construction/preoperational/ start-up testing, is sufficient to demonstrate that the item will perform its safety function.

    b. Please clarify what UL and FM reports are no longer required and the technical justification for eliminating the requirement for the documentation.

7. Attachment B, QL-1LR Applicability, of the MPQAP references Attachment B, Sections 4.1A, B, C, and D. However, Attachment B, Section 4.1 does not identify subsection letter designations. Please clarify the subsection letter designations listed in Attachment B.

8. Attachment B, Section 4.1 states that “Items Relied upon for Safety (IROFS) may be procured directly from suppliers….”

    a. Please clarify whether MOX Services procures IROFS directly from suppliers, or if it procures structures, systems and components (SSCs) that will be designated as basic components and subsequently identified as IROFS through the dedication process.

    a. Please clarify if Attachment B, Section 4.1 applies to the procurement of commercial grade items alone or if it also applies to the procurement of basic components. If basic components are procured using the UL/FM accreditation process how is the UL/FM accreditation process used?

cc:
Mr. Scott Cannon
Federal Project Director
NA-262.1
P.O. Box A
Aiken, SC 29802

Mr. Sam Glenn, Deputy
Federal Project Director
NA-262.1
P.O. Box A
Aiken, SC 29802

Mr. Joseph Olencz, NNSA/HQ
1000 Independence Ave., SW
Washington, DC 20585

Dr. Peter Winokur,, Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Ave., NW, Suite 700
Washington, DC 20004

Susan Jenkins
Division of Radioactive Waste Management
Bureau of Health and Environmental Control
2600 Bull St.
Columbia, SC 292011

D. Silverman
Morgan, Lewis, & Bockius
1111 Penn. Ave., NW
Washington, DC 20004

Diane Curran
Harmon, Curran, Spielburg & Eisenberg, LLP
1726 M St., NW
Suite 600
Washington, DC 20036

G. Carroll
Nuclear Watch South
P.O. Box 8574
Atlanta, GA 30306

L. Zeller
Blue Ridge Environmental Defense League
P.O. Box 88
Glendale Springs, NC 28629