



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

November 24, 2009

Mr. David Stinson
President and Chief Operating Officer
Shaw AREVA MOX Services
Savannah River Site
P.O. Box 7097
Aiken, SC 29804-7097

SUBJECT: APPLICANT PERFORMANCE REVIEW (APR) OF AUTHORIZED ACTIVITIES FOR MOX SERVICES, MIXED OXIDE FUEL FABRICATION FACILITY (MFFF), DOCKET NUMBER 70-3098

Dear Mr. Stinson:

The NRC Region II and Headquarters staffs completed a performance review of the MFFF inspection results and performance in conducting construction activities authorized by the NRC. The review covered the period from October 1, 2008 through September 30, 2009. The areas evaluated included management measures, facility construction, and licensing activities. This letter provides the results of the review and our plans for future inspections at your facility.

The review concluded that overall MFFF construction activities were conducted in an acceptable manner, and the construction program was sufficiently implemented to support ongoing construction activities. The corrective action program implementation activities, including initiation, classification, disposition, and trending were deemed satisfactory. Management and quality assurance oversight adequately monitored and assessed onsite construction activities with the exceptions noted in this letter. Inspection findings were identified during the period that had low, but more than minor, safety significance. Based on our review, performance in the area of design control needs improvement.

Several issues were identified in the area of design control including issues associated with performing, verifying and documenting design changes. Issues identified also involved failures to adequately translate design and authorized activities requirements into design and construction documents. As part of your efforts to improve performance in this area, MOX Services management should evaluate any common causes that underlie the regulatory violations described in the enclosure to this letter; review the effectiveness of prior corrective actions; and take appropriate action. The NRC will conduct additional inspections in the area of design control to assess the effectiveness of MOX Services' actions.

During this assessment period, the NRC identified a violation with several examples in the area of quality assurance oversight of vendors that fabricate components and equipment for use at the MFFF. This violation alone did not indicate a recurring performance issue, was classified as having low risk significance, and was not formally considered as a "program area needing improvement." The violation does indicate a challenge to your quality assurance staff to provide effective oversight of vendors that perform work on, fabricate, or supply components and equipment for use at the MFFF. MFFF oversight of vendors should verify that these vendors

are properly implementing industry codes and standards, meeting quality assurance and technical requirements, and maintaining adequate design control and documentation. The results of our review will be discussed with you and your staff at the Aiken Municipal Center, 215 The Alley, in Aiken, South Carolina during a meeting open to the public on December 17, 2009 at 7:00 p.m.. During the meeting, we would like to hear your own assessment of your performance in the areas we have evaluated, including your evaluation of the common causes that underlie the regulatory violations described in the enclosure to this letter; your review of the effectiveness of prior corrective actions; and any further actions taken or planned.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please refer questions and comments about our review of MOX Services' performance and planned inspections to Deborah Seymour, who can be reached by telephone at 404-562-0556.

Sincerely,

/RA/

Richard P. Croteau, Director
Division of Construction Projects

Docket No. 70-3098
Construction Authorization No. CAMOX-001

Enclosure: Applicant Performance Review

cc w/encl: (See page 3)

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- PUBLICLY AVAILABLE
 NON-PUBLICLY AVAILABLE
 SENSITIVE
 NON-SENSITIVE
- ADAMS: Yes ACCESSION NUMBER: _____
 SUNSI REVIEW COMPLETE

OFFICE	RII:DCP		RII:DCI		HQ:NMSS					
SIGNATURE	WBG		MSL for		Via Email					
NAME	WGloersen		COgle		DDorman					
DATE	11/13/2009		11/16/2009		11/ /2009		11/ /2009	11/ /2009	11/ /2009	
E-MAIL COPY?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

cc w/encls:

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Letter to Mr. David Stinson from Richard P. Croteau dated November 24, 2009

SUBJECT: APPLICANT PERFORMANCE REVIEW (APR) OF AUTHORIZED ACTIVITIES
FOR MOX SERVICES, MIXED OXIDE FUEL FABRICATION FACILITY (MFFF),
DOCKET NUMBER 70-3098

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**APPLICANT PERFORMANCE REVIEW
FOR SHAW AREVA MOX SERVICES
ASSESSMENT PERIOD: October 1, 2008– September 30, 2009**

The following is a summary of the performance of Shaw AREVA MOX Services in the conduct of NRC authorized activities. All the violations described below were considered Severity Level IV violations based on the NRC's Enforcement Policy.

I. PERFORMANCE AREA: MANAGEMENT MEASURES AND FACILITY CONSTRUCTION

This area is comprised of quality assurance program implementation and facility construction activities. Quality assurance includes program implementation; design and document control; control and inspection of materials, equipment and services; problem identification, resolution, and corrective action; 10 CFR Part 21 reporting; control of electronic management data; and safety interfaces. Facility construction included onsite construction activities, engineering activities, and supplier and vendor fabrication activities.

Program Area Needing Improvement

Based on our review, performance in the following areas of design control need improvement:

- Translating design requirements (including codes and standards) into design and construction documents and properly implementing design documents.
 - Violation (VIO) 70-3098/2009-002-002, Failure to correctly translate electrical design requirements into design documents (four examples).
 - VIO 70-3098/2009-003-001, Failure to properly translate structural and seismic requirements into the design change for Drawing DCS01-BMF-DS-PLF-B-01396, Revision 3, dated December 18, 2007.
 - VIO 70-3098/2009-010-002, Failure to perform quality affecting activities in accordance with approved implementing drawings and specifications (three examples).
 - VIO 70-3098/2008-004-002, Failure to perform an adequate design verification of the field drawings prior to release for construction.
 - Confirmatory Order (CO) 70-3098/2009-009-001, Adherence to Engineering Directives to ensure that field drawings match design drawings.
- Initiating, performing, verifying and documenting design changes and evaluating the impact of those changes on the design bases.

- VIO 70-3098/2009-010-003, Inadequate documented justification to changes to a final design involving a deviation from American Concrete Institute (ACI) 349-97 requirements related to the tolerances provided for the location of horizontal rebar in the stirrups of beams.
- VIO 70-3098/2009-003-002, Inadequate design control procedure and engineering change procedure in that they did not require that the methods and results of design verifications be documented in accordance with MOX Project Quality Assurance Plan (MPQAP) Section 3, Design Control.
- VIO 70-3098/2009-003-003, Failure to provide adequate information in Engineering Change Request (ECR)-2730 to validate the adequacy of the change. No information was documented to show that the cutting of the floor structural steel did not impact the design requirements related to the seismic design and drawing DCS01-BMF-DS-PLF-B-01367, Sheet 1, Revision 2. MOX Services did not provide documented justification for use and did not provide documentation that the design analyses for the item was still valid.

II. PERFORMANCE AREA: SPECIAL TOPICS

This area is comprised of licensing activities, including the Fundamental Nuclear Material Control Plan and the Security Plan.

Program Areas Needing Improvement

No specific areas needing improvement were identified.