Shaw | AREVA
MOX SERVICES, LLC

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

2 February 2011
DCS-NRC-000284

Subject: Docket Number 07-03098
Shaw AREVA MOX Services
Mixed Oxide Fuel Fabrication Facility
Part 21 60-Day Interim Report Notification:
Nelson Studs

This letter provides information concerning an evaluation being performed by Shaw AREVA MOX Services, LLC (MOX Services) regarding a deviation identified by MOX Services. The deviation being evaluated pertains to the procurement of post-annealed stainless steel Nelson studs for fabrication of embed plates where as tested yield strengths were found to be below the procurement specification yield value. MOX Services has not concluded that this is a reportable condition in accordance with the requirements of 10CFR 21.21(d) and continued evaluation is required to determine the impact of using post-annealed stainless steel Nelson studs with as tested yield strengths which are not in accordance with MOX Services' procurement specification.

The information required for a 60-Day Interim Report Notification per §21.21(a)(2) is provided in Enclosure 1. The commitment for follow-on actions is provided in Enclosure 1, item (vii).

If you have any questions, please feel free to contact me at (803) 819-2156 or Dealis Gwyn, Licensing Manager at (803) 819-2780.

Sincerely,

Kelly Trice

Kelly D. Trice, President and COO

P. O. Box 7097, Aiken, SC 29804-7097/Savannah River Site, F-Area, Bldg. 706-5F, Aiken, SC 29808

Enclosure:

(1) 60-Day Interim Report Notification Information per §21.21(a)(2)

cc :

Frank Cater, MOX Services
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EDMS: Corresp\Outgoing\NRC\2011 NRC

Enclosure 1

60-Day Interim Report Notification Information per §21.21(a)(2)

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(i) Name and address of the individual or individuals informing the Commission.

Kelly D. Trice
President and Chief Operating Officer
Shaw AREVA MOX Services
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(ii) Identification of the facility, the activity, or the basic component supplied for such facility which fails to comply or contains a defect.

The Mixed Oxide Fuel Fabrication Facility is potentially affected by a deviation associated with the procurement of post-annealed stainless steel studs for fabrication of embed plates where finished product as tested yield strengths were found to be below the procurement specification yield value.

(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

The embed plates are being supplied to MOX Services as a basic component by Specialty Maintenance and Construction, Inc. (SMCI) via commercial grade dedication. Nelson Manufacturing is providing commercial stainless steel post-annealed studs to SMCI.

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

MOX Services has identified that two heats of post-annealed stainless steel studs provided by Nelson (ITN8 and OFP5) have finished product as tested yield strengths which are below MOX Services' procurement specification yield strength. Heat ITN8 represents a shipment of 345 loose studs which are addressed by a nonconformance report and are on QC hold. Heat OFP5 represents 97 loose studs and 8 embed plates which are addressed by two nonconformance reports and have not been installed and are tagged as QC hold. In addition, 6 embed plates with studs from heat OFP5 which were installed have been tagged out of service pending evaluation and is being tracked by a nonconformance report. MOX Services engineering is continuing to evaluate the extent of impact the low yield post annealed Nelson studs may have on the embed plates safety function.

(v) The date on which the information of such defect or failure to comply was obtained.

A Nonconformance Report pertaining to these nelson studs was initiated on December 7, 2010.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

MOX Services does not possess information as to whether other facilities have been supplied a similar basic component by SMCI.

(vii) The corrective action, which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

As part of Condition Report CR 10-694, MOX Services engineering will complete the Part 21 reportability evaluation by April 15, 2011.

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

When procuring studs, ensure that material property requirements are tested post fabrication. The stud manufacturer tested the material properties during fabrication which can and did result in material property test value discrepancies with the final products' material properties. In the case of stud manufacturing, the annealing process as well as attachment of the stud button via press fit or hot heading, which occur after testing by the manufacturer, can decrease the yield strength of the finished stud.

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

This is not an early site permit concern.