



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

DCS-NRC-000374  
28 May 2014

Subject: Docket Number 070-03098  
Shaw AREVA MOX Services  
Mixed Oxide Fuel Fabrication Facility  
Part 21 60-Day Interim Report Notification:  
Nelson Deformed Bars

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 5/8" and 3/4" Nelson deformed bars for fabrication of embed plates where the height of deformations appear to not satisfy the minimum height required by ASTM-A496. 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 these deformed bars based on testing of a representative sampling.

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,

A handwritten signature in cursive script that reads "Kelly D. Trice".

Kelly D. Trice, President and COO

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Enclosure:

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

cc :

Scott Cannon, NNSA/SRS  
Mosi Dayani, NNSA/SRS  
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EDMS: Corresp\\Outgoing\NRC\2014 NRC

**Enclosure 1**

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

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

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

Kelly D. Trice  
President and Chief Operating Officer  
Shaw AREVA MOX Services  
Savannah River Site  
P.O. Box 7097  
Aiken, SC 29804-7097

- (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 evaluating a deviation associated with the procurement of 5/8" and 3/4" Nelson deformed bars for fabrication of embed plates where the average height of deformation appears to not satisfy the average minimum height required by ASTM-A496.

- (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 5/8" and 3/4" carbon steel deformed bars 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, based on witnessing of measurements and methodology at SMCI and Nelson that several 5/8" and 3/4" deformed bars provided by SMCI have a average height of deformation that does not satisfy the minimum average height of deformation required by ASTM-A496. This deviation is being tracked by a nonconformance report. MOX Services engineering is continuing to evaluate the impact these nonconforming 5/8" and 3/4" deformed bars may have on the embed plates safety function.

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

Witnessing of vendor measuring methodology and optical measurements of the 5/8" and 3/4" deformed bar was conducted on April 2, 2014.

- (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.

MOX Services engineering will complete the Part 21 reportability evaluation by September 1, 2014.

- (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.

Due to the manufacturing process used to produce the deformations, it is recommended that measurements for height of deformation be made using an optical comparator.

- (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.