Shaw | AREVA
MOX SERVICES, LLC

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

7 April 2011
DCS-NRC-000294

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

Reference: 1. Letter from K. Trice to U.S. NRC Document Control Desk, DCS-NRC-000284, "Part 21 60-Day Interim Report Notification: Nelson Studs," dated February 2, 2011

Shaw AREVA MOX Services, LLC (MOX Services) submitted an Interim Report (Reference 1), in accordance with the requirements of 10 CFR Part 21, regarding an evaluation of reportability which could not be completed within 60 days from the discovery of the deviation or failure to comply. 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. This deviation was designated as Part 21 Log No. 2010-05.

The purpose of this letter is to close the Interim Report for Part 21 Log No. 2010-05.

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,

FOL Kelly D. Trice, President and COO

Closure of 60-Day Interim Report Notification

SUBJECT:

Closure of Interim Report Notification for Part 21 Log 2010-05 regarding an evaluation of a deviation or a failure to comply per § 21.21(a)(2)

TITLE:

Procurement of post-annealed stainless steel studs for fabrication of embed plates where as tested yield strengths were below the procurement specification yield value.

BASIC COMPONENT SUPPLIED BY:

The embed plates are being supplied as a basic component by Specialty Maintenance and Construction, Inc. (SMCI) via commercial grade dedication.

NATURE OF DEVIATION:

Two heats of post-annealed stainless steel studs (ITN8 and OFP5) provided by SMCI had finished product yield strengths which were below MOX Services' procurement specification yield strength. Heat ITN8 represented a shipment of 345 loose studs. Heat OFP5 represented 97 loose studs and 8 embed plates which had not been installed. In addition, 6 embed plates with studs from heat OFP5 which were installed had been tagged out of service pending evaluation.

EVALUATION:

MOX Services initiated an engineering analysis to determine the allowable capacity of the studs with the reduced yield strength (f_y) The allowable loads, with the reduced strength of f_y=25 ksi, was compared with the applied loads.

Based on the design Factor of Safety for Service Loads, Load Factor and the Strength Reduction Factor, the analysis concludes that the studs with a f_y of 25 ksi, originally designed using a f_y of 30 ksi, would still perform their safety function.

Based on the above results, it has been determined that this issue does not represent a substantial safety hazard.

cc :

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Eric Chassard, MOX Services
Mosi Dayani, NNSA/SRS
Carol Elliott, NNSA/SRS
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