



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

DCS-NRC-000425  
26 May 2016

Subject: Docket Number 070-03098  
CB&I AREVA MOX Services  
Mixed Oxide Fuel Fabrication Facility  
PSSC-029 Completion Letter

Reference: DCS-NRC-000405, letter from CB&I AREVA MOX Services to NRC, dated  
December 21, 2015, 10CFR70.23(a)(8) Completion Process

In support of NRC's Principal Structure System and Component (PSSC) verification activities as required by 10CFR70.23(a)(8), and in accordance with the process outlined in our December 21, 2015 letter (Reference), CB&I AREVA MOX Services, LLC (MOX Services) hereby provides notification that PSSC-029 (Laboratory Material Controls) is complete in accordance with the application. Since the PSSC-029 safety functions derived from the Construction Authorization Request are not required to be credited in the Integrated Safety Analysis Summary (ISAS) in order to meet 10 CFR 70.61 requirements, there are no IROFS components associated with PSSC-029. The enclosure to this letter provides the completion basis for concluding that PSSC-029 is complete in accordance with the application.

If you have any questions, please feel free to contact me at (803) 442-6485 or our Licensing and Nuclear Safety Manager, Dealis Gwyn, at (803) 819-2780.

Sincerely,



David Del Vecchio  
President and Project Manager

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U.S. Nuclear Regulatory Commission  
DCS-NRC-000425  
26 May 2016  
Page 2 of 2

Enclosure:

Completion Basis

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**Enclosure**

**PSSC-029 Completion Basis**

**Completion of PSSC-029, Laboratory Material Controls****PSSC Description**

PSSC-029, Laboratory Material Controls, is associated with the Construction Authorization Request (CAR) Event Group “Laboratory Explosions”. This CAR event is mapped to Integrated Safety Analysis Summary (ISAS) Events EXP-14a and EXP-14b.

**Summary of Key IROFS Components**

There are no IROFS components associated with PSSC-029.

**Summary of Completion Basis**

The laboratory explosion event has been assessed to be limited to a hydrogen event (EXP-14a) and an event produced by an unintended chemical reaction (EXP-14b). The IROFS for EXP-14a and EXP-14b are addressed by PSSC-007 and PSSC-019. No IROFS for these events are associated with PSSC-029. This safety strategy was reviewed and approved by the NRC as documented in *Final Safety Evaluation Report for the License Application To Possess and Use Radioactive Material at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC*. The basis for concluding that PSSC-029 is complete is contained in Completion Package DCS01-AAJ-LO-PPK-W-66012-0.