



U.S. Nuclear Regulatory Commission
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DCS-NRC-000463
05 December 2017

Subject: Docket Number 070-03098
CB&I AREVA MOX Services
Mixed Oxide Fuel Fabrication Facility
PSSC-015 Completion Letter

Reference: DCS-NRC-000461, letter from CB&I AREVA MOX Services to NRC, dated
10 August, 2017, 10CFR70.23(a)(8) Completion Process License Application
Update

In support of NRC's Principal Structure System and Component (PSSC) verification activities as required by 10CFR70.23(a)(8), CB&I AREVA MOX Services, LLC (MOX Services) hereby provides timely notification that PSSC-015 (Emergency DC Power System) construction is complete in accordance with the application. In accordance with Table 17-1 of the License Application (Reference), the IROFS associated with emergency power systems are included in the scope of PSSC-012 (Emergency AC Power Systems). The enclosure to this letter provides the completion basis for concluding that PSSC-015 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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Enclosure:

PSSC-015 Completion Basis

cc:

Scott Cannon, NNSA/SRS
Jason Eargle, USNRC/RII
Michael Ernstes, USNRC/RII
David Faubert, NNSA/SRS
William Gloersen, USNRC/RII
Mark Gober, MOX Services
Dealis Gwyn, MOX Services
Chip Hicks, MOX Services
Dennis Ivey, MOX Services
Charles Nickell, MOX Services
Gilles Rousseau, MOX Services
Kathryn Sutton, ML&B
David Tiktinsky, USNRC/HQ
Paul Whittingham, MOX Services
Bryan Wilkes, MOX Services
Lauren Wylie, MOX Services
Doug Yates, MOX Services
MOX Project Management Office Document Control Administrator (moxpmodca@srs.gov)
EDMS: Corresp\\Outgoing\NRC\2017 NRC

Enclosure

PSSC-015 Completion Basis

Completion of PSSC-015, Emergency DC Power System

PSSC Description

PSSC-015, Emergency DC Power System, is associated with the Construction Authorization Request (CAR) Event Group “Loss of Offsite Power”. This CAR event is mapped to Integrated Safety Analysis Summary (ISAS) Event EMMH-03. The emergency power system is comprised of emergency AC and emergency DC power systems. The Emergency AC Power System is addressed in PSSC-012.

Summary of Key IROFS Components

The Emergency DC Power System consists of two 100% redundant and independent trains that provide 125 VDC power to IROFS loads. Each train consists of a 125 VDC battery, battery charger, power disconnect switch, power distribution panel, circuit breaker panelboards, and power cables that provide, distribute, and control 125 VDC power. As indicated above, the Emergency DC Power System, along with the Emergency AC Power System, are considered together as the Emergency Power System. As described in License Application Table 17-1, *PSSC Completion (not including criticality IROFS)*, the scope of PSSC-015-001 is included in the scope of PSSC-012. The Emergency Power System includes the following components:

- Emergency 4.16kV Power (EAC)
- 480V Power – Emergency (ECC)
- 120V UPS – Emergency (EEC)
- 240/120 VAC Power Distribution – Emergency (EPH)
- 125 VDC Battery – Emergency (EBB)
- 480/277V Power Distribution – Emergency (EPC)
- Fuel Oil – Emergency Diesel Generator (EGF)
- Emergency Control Panels

Summary of Completion Basis

The scope of PSSC-015-001 is included in the scope of PSSC-012. As such, the Emergency Power System IROFS components associated with PSSC-015-001 will be captured during the completion of PSSC-012. Therefore, as the scope of PSSC-015 (PSSC Control Group PSSC-015-001) is included in PSSC-012, PSSC-015-001 is administratively closed. Closing PSSC-015-001 to PSSC-012 is consistent with the information presented in License Application Table 17-1, *PSSC Completion (not including criticality IROFS)*. The basis for concluding that PSSC-015-001 construction is complete is contained in Completion Package DCS01-AAJ-LO-PPK-W-66067-0.