



United States Nuclear Regulatory Commission

Applicant Performance Review (APR)

for

Shaw Areva MOX Services

Mixed Oxide Fuel Fabrication Facility (MFFF)

December 15, 2011

Agenda

7:00 pm	Introduction	NRC
7:15 pm	Inspection Program Overview Discussion of Inspection Activities During APR Period Discussion of APR (Management Measures, Facility Construction, Facility Support)	NRC
7:45 pm	Response to NRC Assessment	MOX Services
8:30 pm	Closing Remarks	NRC

This is a Category 1 meeting in which the public is invited to observe and will have one or more opportunities to communicate with the NRC after the business portion, but before the meeting is adjourned.

To improve our communications, the NRC encourages feedback from meeting participants.

- Please take a few minutes to fill out the NRC public meeting feedback form (NRC Form 659) and return or mail the form to the NRC

- NRC Form 659, the meeting agenda, and other handouts are located on the table near the entrance to the meeting room

- Please sign the attendance sheet



U.S. Nuclear Regulatory Commission

Meeting Participants

Region II (RII), Center for Construction Inspection (CCI):

Patricia K. Holahan, Deputy Regional Administrator for Construction
Terrence Reis, Deputy Director, Division of Construction Projects
Deborah A. Seymour, Branch Chief, Construction Projects Branch 1 (CPB1)
William B. Gloersen, Senior Project Inspector, CPB1
Brannen J. Adkins, Resident Inspector, CPB1
Katherine H. Steddenbenz, Project Inspector, CPB1
Joseph A. Ledford, Public Affairs Officer

Office of Nuclear Materials Safety and Safeguards (NMSS):

Larry L. Campbell, Branch Chief, Mixed Oxide and Uranium Deconversion Branch (MODB)
David Tiktinsky, Senior Project Manager, MODB, FCSS, NMSS
Kevin J. Morrissey, Project Manager, MODB, FCSS, NMSS

Shaw AREVA MOX Services

Meeting Participants

Kelly Trice, President and Chief Operating Officer

Eric Chassard, Executive Vice President and Deputy Project Manager

Leon Lamm, Vice President, Facility Design and Construction

Rodney Whitley, Vice President, Project Assurance



NRC Fuel Cycle Facility Inspection and Assessment Program

Overview

Inspection Program

Applicant Performance Review Program

Why Does NRC Inspect?

Purpose

- To verify that the MOX FFF, including the principal structures, systems, and components, is constructed in accordance with the construction authorization.

Areas NRC Inspects (for construction):

- Quality Assurance
- Construction Activities
- MOX Services Oversight of Vendor Fabrication Activities
- Pre-Operational Readiness Activities

How does NRC Inspect Construction Activities?



MOX FFF On-site Inspection Effort





Principal Systems, Structures, and Components (PSSCs) Inspections Conducted During 2011

PSSC-009	Criticality Control	PSSC-031	Material Handling Controls
PSSC-010	Double-walled Pipe	PSSC-032	Material Handling Equipment
PSSC-011	Electrolyzer Structure	PSSC-036	MOX Fuel Fabrication Building Structure (including vent stack)
PSSC-012	Emergency AC Power System	PSSC-039	Polytetrafluoroethylene (PTFE) Insulator
PSSC-015	Emergency DC Power System	PSSC-041	Process Cells
PSSC-023	Fluid Transport Systems	PSSC-048	Sintering Furnace
PSSC-024	Glove Boxes	PSSC-053	Waste Transfer Line
PSSC-026	Guide Sleeves		

Programmatic Inspections Conducted During 2011

- Quality Assurance Program
 - Implementation
 - Design Control
 - Control of Materials, Equipment , and Services
 - Control of Measuring and Test Equipment
 - 10 CFR Part 21 (Reporting of Defects and Noncompliance)
 - Records Control
- Corrective Action Program
 - Problem Identification, Resolution, and Corrective Action
- Software Quality Assurance Program
- Resident Inspector Program

Supplier/Vendor Oversight Inspections Conducted During 2011

<u>Vendor</u>	<u>Component</u>	<u>Inspection Report Number</u>
Premier Technology, Inc.	Annular and Slab Tanks	70-3098/2011-001
AREVA - Mecagest	Electrolyzer Components	70-3098/2011-004 ¹
ACPP (Atelier de Chaudronnerie du Petit Parc)	Electrolyzer Glove Box	70-3098/2011-004 ¹
FNAG (Furnaces Nuclear Applications Grenoble)	Sintering Furnace	70-3098/2011-004 ¹

¹ Inspection report period will end on 12/31/2011

NRC Inspection Reports

□ Three NRC inspection reports were published during 2011

- 70-3098/2011-001 (January 1 – March 31, 2011)
- 70-3098/2011-002 (April 1 – June 30, 2011)
- 70-3098/2011-003 (July 1 – September 30, 2011)
- 70-3098/2011-004 (October 1 – December 31, 2011 (in process))

□ Inspection results can be easily followed

- Inspection Reports are available in the Publicly Available Records (PARS) component of NRC's document system (ADAMS)
- <http://www.nrc.gov/materials/fuel-cycle-fac/mox/meetings.html#ir>

Applicant Performance Review Program

Integrated Assessment

- Management Measures
- Facility Construction
- Special Topics

Performance based

NRC Inspection Manual Chapters (IMC) 2630 and 2604

Applicant Performance Review Program (continued)

Performed Annually

Changes

- Next assessment period is scheduled for October 1, 2011 through December 31, 2012
- Subsequent assessment periods are planned to occur on a calendar year cycle from January 1 through December 31
- Consistent with the assessment periods of the other construction projects and the operating fuel cycle facilities

**Applicant Performance Review
for
Shaw Areva MOX Services
Mixed Oxide Fuel Fabrication Facility**

October 1, 2010 to September 30, 2011

Performance Areas:

- ❑ *Management Measures*
- ❑ *Facility Construction*
- ❑ *Special Topics*

Management Measures

Includes:

- Quality Assurance Program Implementation*
- Design and Document Control*
- Control and Inspection of Materials, Equipment and Services*
- Problem Identification, Resolution, and Corrective Action Program*
- Reporting of Defects and Noncompliances' (10 CFR Part 21)*
- Control and Management of Electronic Data*
- Supplier Vendor Inspections*
- Safety Function Interfaces*

Facility Construction

Includes:

- Geotechnical/Foundation Activities*
- Structural Concrete*
- Structural Steel and Supports*
- Piping Systems*
- Welding*
- Mechanical Components and Systems*
- Electrical Components and Systems*
- Instrumentation and Control Systems*
- Ventilation and Confinement Systems*

Special Topics

Includes:

Licensing Activities



Applicant Performance Review

Results

Applicant Performance Review Results:

- Overall, MFFF construction activities were conducted in an acceptable manner
- Construction program was sufficiently implemented to support ongoing construction activities
- Corrective action program implementation activities, including initiation, classification, disposition, and trending were deemed satisfactory

Applicant Performance Review Results (continued):

- Management and quality assurance oversight adequately monitored and assessed onsite construction activities

- Since no actual or potentially risk significant recurring items were identified, no areas were identified as meeting the definition of an area needing improvement

Applicant Performance Review Results (continued):

- NRC inspection findings were identified during the period that had low, but more than minor, safety significance
- Shaw AREVA MOX Services has taken corrective actions to improve performance

Applicant Performance Review Results (continued):

- ❑ Routine inspections at the MFFF are planned for 2012
 - Inspections of principal structures, systems and components (PSSCs)
 - Inspections of programs:
 - ❖ Quality Assurance Program
 - ❖ Corrective Action Program
 - ❖ Commercial Grade Dedication Program
 - ❖ Software Program
 - ❖ Resident Inspector Program

- ❑ Inspections of Shaw AREVA MOX Services' oversight of its suppliers and vendors will continue



Applicant Performance Review

Shaw AREVA MOX Services
Remarks



Applicant Performance Review

Closing Remarks



Questions for NRC Staff from Members of the Public