



United States Nuclear Regulatory Commission

Applicant Performance Review (APR)
for
Shaw Areva MOX Services
Mixed Oxide Fuel Fabrication Facility (MFFF)
December 17, 2009

Agenda

7:00 pm	Introduction	NRC
7:15 pm	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, it would be beneficial to hear from meeting participants.

- Please take a few minutes to fill out the NRC public meeting feedback form (NRC Form 959) and return or mail the form to the NRC
- NRC Form 959, 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

NRC Staff Present Today

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

Richard P. Croteau, Director, Division of Construction Projects (DCP)
Deborah A. Seymour, Branch Chief, Construction Projects Branch 1 (CPB1)
Kathleen O'Donohue, Branch Chief, Construction Inspection Branch 2 (CIB2)
William B. Gloersen, Senior Project Inspector, CPB1
Melvin Shannon, Senior Resident Inspector, CPB1
Rahsean Jackson, Senior Construction Inspector, (CIB2)

Office of Nuclear Materials Safety and Safeguards (NMSS):

Daniel H. Dorman, Director, Division of Fuel Cycle Safety and Safeguards (FCSS)
Michael A. Norato, Branch Chief, MOX Branch, FCSS, NMSS
David Tiktinsky, Senior Project Manager, MOX Branch, FCSS, NMSS



U.S. Fuel Cycle Facility Inspection Program

Overview

Inspection Program

Applicant Performance Review Program

Why Does NRC Inspect?

- Purpose
 - To verify that the MOX FFF is constructed in accordance with the construction authorization.
- Areas Inspected (for construction):
 - Quality Assurance
 - Construction Activities
 - Vendor Fabrication Activities
 - Pre-Operational Readiness Activities

How does NRC Inspect?



Inspections Completed Since January 2008

- **2008:** January 1 - December 31, 2008
 - ❑ 11 Inspections
 - ❑ Covered 13 Inspection Procedures
 - ❑ Roughly 1,900 hours of direct inspection effort
- **2009:** January 1 – November 30, 2009
 - ❑ 10 Inspections
 - ❑ Covered 12 Inspection Procedures
 - ❑ Roughly 2,200 hours of direct inspection effort

Applicant Performance Review Program

☐ Integrated Assessment

- Management Measures
- Facility Construction
- Special Topics

☐ Performance based

☐ NRC Inspection Manual Chapter (IMC) 2630

Performance Indicators

- Defined in NRC IMC 2630
- Defines Areas Needing Improvement
 - Addresses recurring performance issues

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

October 1, 2008 to September 30, 2009

Performance Areas:

- ❑ *Management Measures*
- ❑ *Facility Construction*
- ❑ *Facility Support*

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*
- *10 CFR Part 21 Reporting*
- *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*

Facility Support

Includes:

- *Licensing Activities*
- *Fundamental Nuclear Material Control Plan*
- *Security Plan*



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 with some exceptions
- ☐ Inspection findings were identified during the period that had low, but more than minor, safety significance
- ☐ Performance in the area of design control needs improvement

Design Control Focus Areas:

- Translating design requirements (including codes and standards) into design and construction documents and properly implementing design documents
 - Several issues were identified that involved failures to adequately translate design and authorized activities requirements into design and construction documents
 - The issues had low, but more than minor, safety significance
- Initiating, performing, verifying and documenting design changes and evaluating the impact of those changes on the design bases
 - Several issues were identified associated with performing, verifying and documenting design changes
 - The issues had low, but more than minor, safety significance



Applicant Performance Review

MOX Services Remarks



Applicant Performance Review

Closing Remarks



Applicant Performance Review

Questions for NRC Staff