# WELCOME

Construction Status Public Meeting
Mixed Oxide (MOX) Fuel Fabrication Facility

July 24, 2012



# **Category 1 Public Meeting**



- Attendance sheet
- Feedback forms
- Public invited to observe business portion of the meeting
- Public will have one or more opportunities to ask NRC staff questions before the meeting adjourns
- NRC staff available after the meeting
- Agenda, slides, meeting summary, and list of attendees in Agency wide Documents Access and Management System (ADAMS)

http://www.nrc.gov/reading-rm/adams.html

# **Agenda**



2:00 p.m.	Introductions	NRC
	Opening Remarks	NRC DRAC
	Status of MOX Fuel Fabrication Facility Construction Project	MOX Services
	<b>Update on Construction Schedule</b>	
	Discussion of Challenges and Lessons-Learned	MOX Services NRC
3:00 p.m.	Update on Construction Inspection Activities	NRC
	Closing Remarks	NRC
3:30 p.m.	<b>Public Comments and Questions</b>	NRC
4:00 p.m.	Meeting Adjourned	

# Meeting Participants



### **Nuclear Regulatory Commission**

#### Region II (RII)

Frederick Brown, Deputy Regional Administrator for Construction Joel Munday, Director, Division of Construction Projects Deborah Seymour, Branch Chief, Construction Projects Branch 1 (CPB1) William Gloersen, Senior Project Inspector, CPB1 Brannen Adkins, Resident Inspector, CPB1 Katherine Steddenbenz, Project Inspector, CPB1 Roger Hannah, Senior Public Affairs Officer Joseph Ledford, Public Affairs Officer

#### Office of Nuclear Materials Safety and Safeguards (NMSS)

David Tiktinsky, Senior Project Manager Mixed Oxide and Uranium Deconversion Branch (MODB) Kevin Morrissey, Project Manager, MODB, FCSS, NMSS

# Meeting Participants



#### Shaw AREVA MOX Services

Kelly Trice, President and Chief Operating Officer

Steve Marr, Executive Vice President and Deputy Project Manager

Mark Gober, Vice President, Engineering

Rodney Whitley, Vice President, Project Assurance

Dealis Gwyn, Manager, Licensing and Nuclear Safety Analysis

# Construction Inspection Program Update





# Principal Systems, Structures, and Components (PSSCs) Construction Verification Update



# Background



- 10 CFR 70.23(a)(8) requires that NRC verify that the construction of principal structures systems and components (PSSCs) (design basis) has been completed in accordance with the application (for plutonium processing facilities)
  - PSSCs were defined in the Construction Authorization Request
  - Verification is a joint NRC inspection, technical review and administrative review activity
  - Joint NMSS/Region II expert panel was formed to implement PSSC verification plans and activities

# What needs to be verified



- 53 PSSCs were defined in the Construction Authorization Request and approved by staff in the Construction Authorization (100% must be verified)
- PSSCs can be administrative controls, active engineered controls, passive engineered controls, or use of an approved item
  - PSSCs may include multiple safety functions and IROFS
  - PSSCs may support or be part of other PSSCs
- Verification of construction of a PSSC varies depending on nature of PSSC
  - Inspections (component specific or programmatic)
  - Procedure reviews
  - Other approvals (e.g., transportation package certification)
- Verification includes an assessment that the design basis safety function for each PSSC has been constructed in accordance with the application (through technical reviews and inspections)

# **PSSC Verification Program Status**



- IROFS have been prioritized for inspection purposes by staff using a risk-informed process
- Verification plan developed for each PSSC
- Inspections currently performed by resident and regional inspectors to support verification
- Documentation tracking system has been developed for all inspection activities
- Inspection activities to increase substantially as construction activities increase
- Multiple year verification process
- Verification process must be successfully completed prior to license issuance

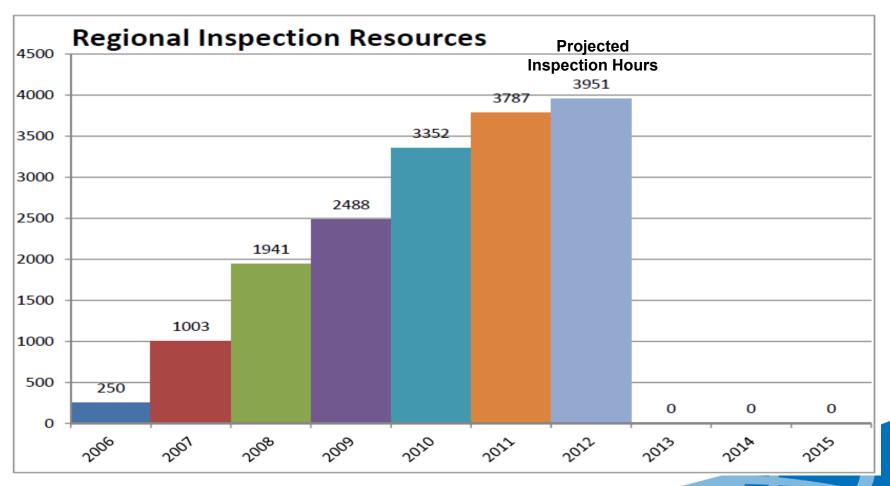
# Inspection Program Overview



- Resident Inspector Program
  - Two Resident Inspectors
- Quality Assurance (QA) Inspections
  - Design Control
  - Corrective Action Program (CAP)
  - Control of Materials, Equipment, and Services
  - Procurement
  - Test Control
- Construction Inspections
  - Civil and Structural
  - Mechanical Components
  - Special Processes welding
  - Electrical (Instrumentation and Controls)

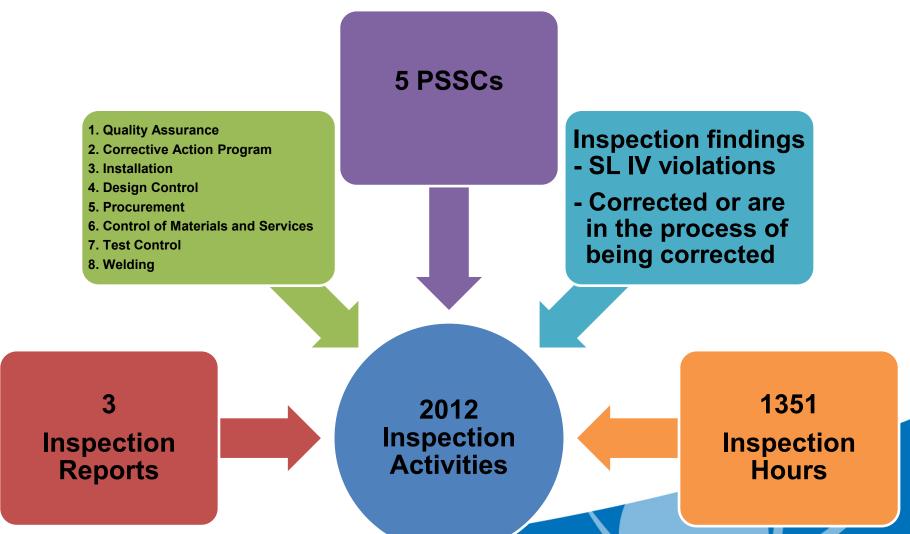
## **Inspection Program Updates**





# 2012 Inspection Activities





# PSSC Inspections Conducted During 2012



PSSC-009 Criticality Control

PSSC-021 Fire Barriers

PSSC-023 Fluid Transport Systems

PSSC-036 MOX Fuel Fabrication Building Structure

(including vent stack)

PSSC-050 Supply Air Systems

# **NRC Inspection Reports**



- ☐ Three NRC inspection reports during 2012
  - > 70-3098/2012-001 (January 1 March 31, 2012)
  - > 70-3098/2012-002 (April 1 June 30, 2012)
  - > 70-3098/2012-005 (June 18 21, 2012) (Under Review)
- □ Inspection results and other MOX FFF information including licensing activities and the construction inspection program can be easily followed on the MOX Fuel Fabrication Facility public website
  - http://www.nrc.gov/materials/fuel-cycle-fac/mox/licensing.html#4
  - Information also available in ADAMS

# Programmatic Inspections Planned for 2012



- 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

# Acronyms



ADAMS Agencywide Documents Access and Management System

CFR Code of Federal Regulations

DRAC Deputy Regional Administrator for Construction

IROFS Items Relied on for Safety

MFFF Mixed Oxide Fuel Fabrication Facility

MOX Mixed Oxide

NMSS Office of Nuclear Material Safety and Safeguards

NRC Nuclear Regulatory Commission

PARS Publically Available Records System

PSSC Principal Systems, Structures, and Components