United States Nuclear Regulatory Commission

Assessment of Applicant Performance (AAP)
for
Shaw Areva MOX Services
Mixed Oxide Fuel Fabrication Facility (MFFF)
December 15, 2008

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Agenda

7:00 pm	Introduction	NRC
7:15 pm	Discussion of AAP (Management Measures, Facility Construction, Facility Support)	NRC
7:45 pm	Response to NRC Assessment	MOX Services
8:15 pm	Closing Remarks	NRC

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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.

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U.S. Nuclear Regulatory Commission

NRC Staff Present Today

Tony Gody, Deputy Director, Division of Construction Projects (DCP), Center for Construction Inspection (CCI), Region II (RII)

Margaret Kotzalas, Branch Chief, MOX Branch, Division of Fuel Cycle Safety and Safeguards (FCSS), Nuclear Materials Safety and Safeguards (NMSS)

Deborah Seymour, Branch Chief, Construction Projects Branch 1 (CPB1), DCP, CCI, RII

David Tiktinsky, Senior Project Manager, MOX Branch, FCSS, NMSS

William Gloersen, Senior Project Inspector, CPB1, DCP, CCI, RII

Melvin Shannon, Senior Resident Inspector, CPB1, DCP, CCI, RII

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Introduction

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U.S. Fuel Cycle Facilities

– Eight fuel facilities are currently operating in the United States

– Three facilities are under construction
  - LES National Enrichment Facility
  - Mixed Oxide Fuel Fabrication Facility (MFFF)
  - USEC American Centrifuge Project

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Licensee / Applicant	Location
Uranium Fuel Fabrication Facilities	
Global Nuclear Fuel-Americas, LLC	Wilmington, North Carolina
Westinghouse Electric Company, LLC	Columbia, South Carolina
Nuclear Fuel Services, Inc.	Erwin, Tennessee
AREVA NP, Inc.	Lynchburg, Virginia
BWX Technologies, Inc.	Lynchburg, Virginia
AREVA NP, Inc.	Richland, Washington
Uranium Hexafluoride Production (Conversion) Facility	
Honeywell International, Inc.	Metropolis, Illinois
Gaseous Diffusion Enrichment Facilities	
U.S. Enrichment Corporation	Paducah, Kentucky
U.S. Enrichment Corporation (cold shutdown)	Piketon, Ohio
Gas Centrifuge Enrichment Facilities	
USEC Inc. (construction)	Piketon, Ohio
Louisiana Energy Services (construction)	Eunice, New Mexico
Mixed Oxide Fuel Fabrication Facilities	
Shaw AREVA MOX Services (construction)	Aiken, South Carolina

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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
  - Pre-Operational Readiness

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How does NRC Inspect?

- Senior Resident Inspector
- Construction Inspectors
- Operations Inspectors

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Assessment of Applicant Performance Program

Objectives:

- Provides NRC management a performance based opportunity to adjust regulatory oversight
- Integrated assessment across key functional areas
- Provides input for future inspection planning

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Assessment of Applicant Performance Program

Methodology:

Review applicant's performance relative to key functional areas using a standardized approach

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Assessment of Applicant Performance Program

Methodology (continued):

- Assessment data are collected from NRC quarterly and special team inspection report findings
- Areas inspected
  - Quality Assurance Program
  - Vendor Inspections
  - Construction Activities
  - Resident Inspector Oversight Activities

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Assessment of Applicant Performance Program

Methodology (continued):

- Key functional areas for assessing construction performance at the MFFF during this assessment period included:
  - Management Measures
  - Facility Construction
  - Special Topics

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Assessment of Applicant Performance Program

Methodology (continued):

- Multi-disciplined input from both inspection and licensing staff
- Key functional areas assessed
- Information reviewed by all participants
- Regional and program office management review

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Assessment of Applicant Performance Program

Methodology (continued):

- Performance assessment
  - Input presented/defended with publically available inspection data
  - Staff and management consensus achieved
  - Provides a basis for adjusting facility's inspection program in such areas as focus, frequency and resources.

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Assessment of Applicant Performance Program

Methodology (continued):

- Results communicated to applicant through a report and public management meeting
- This meeting provides an opportunity for a two-way dialogue between the NRC and the applicant in a public forum.

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Performance Indicators

- Areas Needing Improvement
  - Defined in IMC 2630
    - Actual and/or potential risk-significant recurring performance (root causes or events) requiring resolution or corrective action
    - Less weight given to issues identified early in the assessment period, provided the applicant's management corrected the problems
    - More weight given to issues identified late in the assessment period

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Areas Needing Improvement (continued)

- Normally, three recurring performance issues in a specific discipline may indicate an area needing improvement
- For example, in the area of quality assurance, performance was evaluated in the following disciplines:
  - Program implementation
  - Design and document control
  - Control and inspection of materials, equipment and services
  - Problem identification, resolution, and corrective action
  - 10 CFR Part 21 reporting
  - Control of electronic management data
  - Supplier and vendor inspections
  - Safety interfaces

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Assessment of Applicant Performance for Shaw Areva MOX Services Mixed Oxide Fuel Fabrication Facility

October 16, 2006 to September 30, 2008

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Performance Area: Management Measures

Includes quality assurance, design controls, configuration management, procedures, audits, assessments and records

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Performance Area: Management Measures

Quality Assurance Includes:

- *Program implementation*
- *Design and document control*
- *Control and inspection of materials, equipment and services*
- *Problem identification, resolution, and corrective actions*
- *10 CFR Part 21 reporting*
- *Control of electronic management data*
- *Supplier vendor inspections*
- *Safety function interfaces*

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Performance Area: Management Measures

No specific areas needing improvement were identified

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Performance Area: Facility Construction

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*

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Performance Area: Facility Construction

No specific areas needing improvement were identified

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Performance Area: Facility Support

Facility Support Includes:

- *Training and qualifications of plant personnel*
- *Safeguards*
- *Security*
- *Special topics*
  - *Licensing Activities*

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Performance Area: Facility Support

No specific areas needing improvement were identified for licensing activities

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Assessment of Applicant Performance

Response to NRC Review

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Assessment of Applicant Performance

Closing Remarks

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