



Briefing on the Results of the Agency Action Review Meeting

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Objectives

- **Review agency actions for material and reactor licensees**
- **Coordinate agency actions**
- **Review industry trends**

Overview

- **No significant adverse trends and no gaps or failures for the Materials and Waste Programs**
- **No significant adverse trends and no program adjustments recommended for the ROP**
- **Agency actions ensured licensed facilities continue to operate safely**

Agenda

- **Materials and Waste Performance Trends – Brian McDermott, FSME**
- **Industry Trends Program and ROP Self-Assessment – Ho Nieh, NRR**
- **Reactor Licensee Discussions**
 - **Browns Ferry – Gene Guthrie, RII**
 - **Fort Calhoun – Tony Vogel, RIV**

Materials Performance Trends

**Brian J. McDermott, Director
Division of Materials Safety and
State Agreements
FSME**

Performance Evaluation Process

- **Systematic review to identify significant:**
 - **Operational performance trends**
 - **Licensee performance issues**
 - **NRC program issues/gaps**

Performance Criteria

- **Strategic outcomes**
- **Performance measures**
- **Abnormal occurrences**
- **Trending review of event data**
- **Significant enforcement actions**
- **AARM Criteria**

Strategic Outcomes & Performance Measures

- **All strategic outcomes were realized**
- **Safety performance measures were met**
- **Security performance measures were met**

Abnormal Occurrences

- **22 AOs in FY 2012**
- **Number of AOs is small relative to the millions of activities involving radioactive material**
- **No significant performance trends were identified**

Materials Licensee and NRC Program Performance

- **One nuclear materials licensee met the AARM discussion criteria for FY 2012**
- **No NRC program gaps or failures**

Closing Remarks

- **All strategic goals, safety and security performance metrics were met in FY 2012**
- **No significant trending issues**
- **No significant NRC program issues**

Industry Trends Program

- **Assess safety performance of nuclear industry**
- **Objective thresholds for action**
- **IMC 0313 – Industry Trends Program**
- **SECY-13-0038**

FY 2012 Industry Trends Results

- **No long-term industry trends identified**
- **No short-term industry performance limits exceeded**
- **FY 2011 ITP results update**

FY 2012 Industry Trends Results (cont.)

- **No events exceeded limits within Baseline Risk Index for Initiating Events**
- **No ROP program adjustments recommended**

ROP Self-Assessment Program

- **Assess ROP effectiveness in meeting program goals**
- **Develop recommendations for improvement**
- **IMC 0307 – Reactor Oversight Process Self-Assessment Program**
- **SECY-13-0037**

ROP Self-Assessment Results

- **Met performance goals and achieved intended outcomes**
- **No specific commitments from CY 2012 self-assessment**
- **Multiple performance metrics missed**

Action Matrix Deviations

- **Two deviations in 2012**
 - **Seabrook, September 2012**
 - **Palisades, November 2012**
- **Plan to clarify deviation program guidance**

2012 ROP Significant Accomplishments

- **Reintegrated security into ROP assessment program**
- **Finalized common language for Safety Culture for power reactors**
- **Developed Cyber Security SDP**
- **Improved Force-on-Force SDP**

2013 Significant Focus Areas

- **Commenced ROP enhancement efforts and independent review**
- **Enhancing inspection guidance in Public Radiation Safety Cornerstone**

Review of Browns Ferry Performance

**Eugene F. Guthrie, Branch Chief
Division of Reactor Projects
Region II**

Performance Overview



- **Multiple Repetitive Degraded Cornerstone**
- **Past year performance**
- **Safety Culture**

Going Forward

- **95003 Part 3 Inspection**
- **Inspection follow-up**
- **Performance assessment**
- **NFPA 805 transition**

Review of Fort Calhoun Performance

**Tony Vogel, IMC 0350 Panel Chair
Region IV**

Background



- **Entry into IMC 0350 on December 13, 2011**
- **Confirmatory Action Letter**
- **Restart Checklist**
- **Restart Checklist Basis Document**

Performance Overview

- **Inspection activities**
- **Performance assessment**

Going Forward

- **Complete inspections**
- **Performance and plant restart assessment**
- **Perform thorough and independent verification of plant safety**

OPTIONAL BACKGROUND SLIDES

Medical Event Reporting

- **48 Medical Events FY 2012 (64 patients) from 7473 medical use licensees (1,083 NRC and 6,390 Agreement State licensees)**

| Modality | Medical Event Incidence Rate | Number of Medical Events | Number of Procedures |
|--|------------------------------|--------------------------|----------------------|
| Diagnostic Radiopharmaceutical Imaging | 0.000026% | 4 | 15,000,000 |
| Iodine-131 Procedures | 0.0022% | 2 | 92,000 |
| Permanent Implant Prostate Brachytherapy | 0.13% | 22 | 17,500 |
| HDR Brachytherapy | 0.036% | 12 | 33,000 |
| Yttrium-90 Microsphere | 0.29% | 21 | 7,200 |
| Overall Medication Errors (Baylor University Medical Center Proceedings) | 11% | 111 | 1,000 |

Examples of NRC-regulated Treatment Modalities

Y-90 microspheres vial & administration kit (liver cancer)

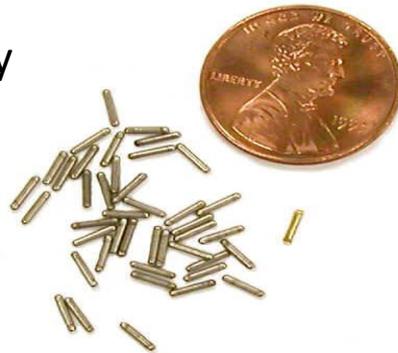


Photo Courtesy of Sirtex



I-125 brachytherapy (prostate cancer)

Photo Courtesy of Oak Ridge Associated University



I-131 capsule (thyroid cancer)

Photo Courtesy of Covidien

List of Acronyms

- **AO – Abnormal Occurrence**
- **AARM – Agency Action Review Meeting**
- **CY – Calendar Year**
- **EDO – Executive Director for Operations**
- **FSME – Office of Federal and State Materials and Environmental Management Programs**

List of Acronyms (cont.)

- **FY – Fiscal Year**
- **IMC – Inspection Manual Chapter**
- **ITP – Industry Trends Program**
- **NFPA – National Fire Protection Association**
- **NRC – U.S. Nuclear Regulatory Commission**

List of Acronyms (cont.)

- **NRR – Office of Nuclear Reactor Regulation**
- **RII – Regional Office II**
- **RIV – Regional Office IV**
- **ROP – Reactor Oversight Process**
- **SDP – Significance Determination Process**
- **SECY – Office of the Secretary**