



Briefing on the Results of the Agency Action Review Meeting

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**Deputy Executive Director for Reactor
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Objectives

- **Review agency actions for material and reactor licensees**
- **Coordinate agency actions**
- **Review Reactor Oversight Process self-assessment**
- **Review industry trends**

Licensed Activities Safe and Secure

- **Agency actions were appropriate for licensees with significant performance issues**
- **No significant adverse trends and no significant adjustments recommended for the Materials and Waste Programs**
- **No significant adverse trends and no significant adjustments recommended for the Reactor Oversight Process**

Agenda

- **Materials and Waste Performance Trends – Laura Dudes, FSME**
- **Industry Trends Program and Reactor Oversight Process Self-Assessment – Allen Howe, NRR**
- **Reactor Licensee Discussions**
 - **Browns Ferry – Victor McCree, RII**
 - **Fort Calhoun – Marc Dapas, RIV**

Materials Performance Trends

**Laura Dudes, 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**
- **Trending review of Nuclear Material Events Database (NMED) data**
- **Abnormal occurrences**
- **Significant enforcement actions**
- **Agency Action Review Meeting Criteria**

No Significant Performance Trends Identified

- **415 NMED events**
- **10 Abnormal Occurrences**
- **Event numbers small compared to the millions of uses**

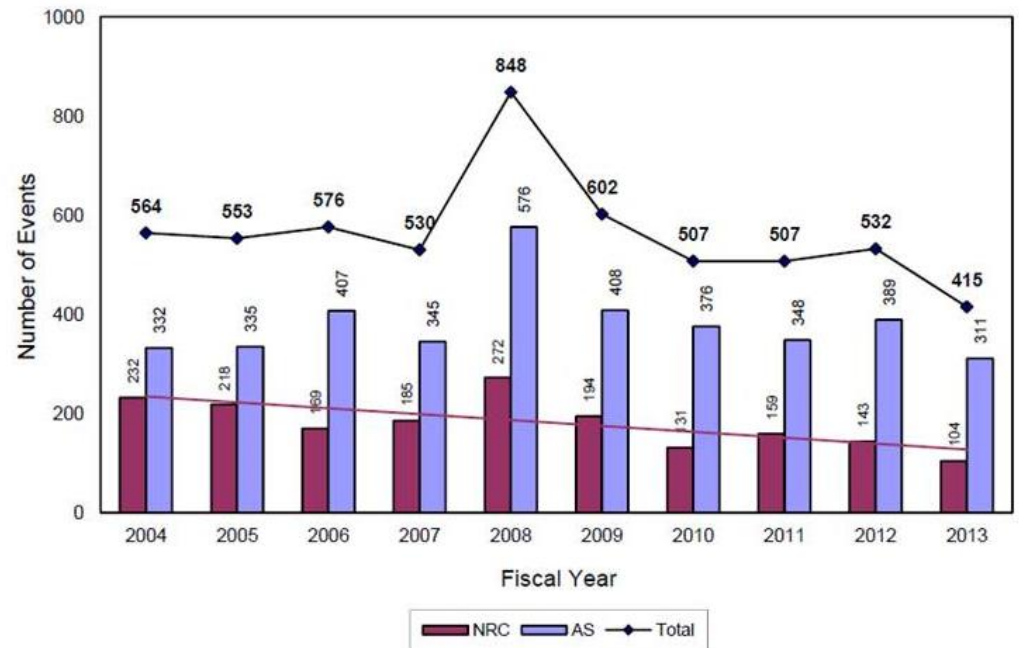


Figure 1. All NMED Events (5,634 total) from SECY 14-0035, “Annual Report to the Commission on Licensee Performance in the Materials and Waste Programs Fiscal Year 2013”

Radiography Events Special Study



welding



setup



crank out



exposure



move source

Met Strategic Goals

- **Two nuclear materials licensees met the Agency Action Review Meeting discussion criteria**
- **Materials program met safety and security performance metrics**
- **No significant trending issues**
- **No significant NRC program issues**

Reactor Assessments

**Allen Howe, Deputy Director
Division of Inspection and
Regional Support**

Office of Nuclear Reactor Regulation

Industry-Wide Safety Performance Maintained

- **No long-term industry trends identified with existing data**
 - **Ongoing review**
- **No short-term industry performance limits exceeded**
- **No events exceeded limits within Baseline Risk Index for Initiating Events**

Industry Trends Program Improves

- **Considering all oversight cornerstones**
- **Using additional Performance Indicator information**
- **Evaluating incorporation of new reactors performance data**

Oversight Process Is Effective

- **Met performance goals and achieved intended outcomes**
- **Appropriately focused resources based on performance**
- **Impact of furlough**

Oversight Process Deviation

- **Action Matrix Deviation**
 - **Perry (Jan. 2013)**
- **Plan to add flexibility to guidance**
- **Revised guidance based on lessons learned from 2012 deviations**

Oversight Activities

- **Internal and External Activities**
 - **Oversight Enhancement Project**
 - **Independent Review**
 - **Other evaluations**
- **Incorporated safety culture common language into oversight process**
- **Provided recommendations for risk-informing new reactors**

Future Oversight Improvements

- **Evaluate feedback and implement appropriate oversight improvements**
- **Explore improvements to the oversight self-assessment process**
- **Continue emphasis on stakeholder involvement**
- **Transition from construction oversight to operating oversight**

Review of Browns Ferry Performance

**Victor McCree
Regional Administrator, RII**

Background



- **Unit 1 Multiple/Repetitive Degraded Cornerstone Column (Column 4), since fourth quarter 2010**
 - **Red Finding (LPCI valve) closed**
 - **Confirmatory Action Letter (CAL) closed**
 - **Unit 1 remains in Column 4 due to additional Action Matrix inputs**

Background (cont.)

- **Unit 2 Degraded Cornerstone Column (Column 3), since fourth quarter 2012**
 - **Inspection Procedure (IP) 95002 Supplemental Inspection completed**
 - **Unit 2 remains in Column 3 due to additional Action Matrix inputs**

Background (cont.)

- **Unit 3 Regulatory Response Column (Column 2), since second quarter 2012**
 - **Previous IP 95001 Supplemental Inspection completed**
 - **Unit 3 remains in Column 2 due to White Emergency Preparedness Finding**

Current Plant Status

- **Unit 1 – At power since March 2013 after degraded vacuum related scram**
- **Unit 2 – At power since May 2013 following refueling outage**
- **Unit 3 – At power since May 2014 after a scram from a testing issue**

Browns Ferry Operated Safely

- **NRC conducted Baseline, Supplemental and CAL Closure inspections in 2013**
- **NRC inspections identified improvements in station performance**
- **NRC inspections identified improved understanding of the importance of a strong safety culture**

Completed Inspection Procedure 95003

- **NRC identified no findings of greater-than-Green significance**
- **CAL issued to establish basis for closure of Red Finding**
 - **Short term (Tier 1) actions**
 - **Longer term (Tier 2) actions for continued performance improvement**

Completed CAL Closure Inspection

- **Confirmed adequacy of Tennessee Valley Authority (TVA) actions to address all Tier 1 items**
- **No findings were identified**
- **Closed Red Finding and CAL**

Substantive Cross-Cutting Issues Closed

- **Closed two long standing Substantive Cross-Cutting Issues (SCCI) based on results of IP 95003 Supplemental Inspection**
- **Closed one SCCI based on results of CAL closure inspection**
- **No new SCCIs opened**

Open Confirmatory Orders

- **2009 Confirmatory Order for Discrimination**
 - **TVA continues to implement actions associated with the Confirmatory Order**

Open Confirmatory Orders (cont.)

- **2014 Confirmatory Order for 10CFR50 Appendix R Operations Minimum Staffing Level**
 - **Associated with White Emergency Preparedness Finding**
 - **SLIII 50.9 (Inaccurate Information)**
 - **SLIII 50.90 (Improper License Change)**

Going Forward

- **Perform IP 95001 Supplemental Inspection for Emergency Preparedness White Finding**
- **Perform inspections to verify adequate implementation of Confirmatory Order actions**

Going Forward (cont.)

- **Perform baseline inspections to verify adequate implementation of Tier 2 actions**
- **Assess licensee performance for expected Performance Indicator changes**

Review of Fort Calhoun Station Performance

**Marc Dapas
Regional Administrator, RIV**

Fort Calhoun Station



- **Regulatory Oversight**
- **Restart Readiness Decision**
- **Going Forward**

Regulatory Oversight

- **Yellow Finding – inadequate flood protection (Oct. 2010)**
 - **Transition to Reactor Oversight Process (ROP) Action Matrix Column 3**
- **Shutdown for refueling outage (Apr. 2011)**
- **Missouri River flood (May 2011)**
- **Electrical switchgear fire (June 2011)**

Regulatory Oversight (cont.)

- **White Finding – reactor protection system failed contactor (July 2011)**
- **Transition to ROP Action Matrix Column 4 (Sept. 2011)**
- **CAL issued (Sept. 2011)**
 - **post flooding recovery actions**

Regulatory Oversight (cont.)

- **Transition to Inspection Manual Chapter 0350 Process (Dec. 2011)**
- **Omaha Public Power District/Exelon Services Agreement (Jan. 2012)**
- **Commission briefing (Feb. 2012)**
- **Red Finding for switchgear fire (Apr. 2012)**

Regulatory Oversight (cont.)

- **Revised CAL Issued (June 2012)**
 - **added restart checklist**
 - **contained IP 95003 key attributes**
- **Commission briefing (June 2012)**
- **Restart Checklist Basis Document issued (Nov. 2012)**

Regulatory Oversight (cont.)

- **Commission briefing (Jan. 2013)**
- **Revised CAL issued (Feb. 2013)**
 - **Added 3 Restart Checklist items**
- **Commission briefing (May 2013)**

Restart Readiness Decision

- **Restart Checklist inspection activities completed (Dec. 2013)**
 - **23,000 hours of NRC inspection, assessment, and licensing activities**
- **Comprehensive corrective actions independently verified**
- **CAL closed (Dec. 2013)**
- **Post-Restart CAL issued (Dec. 2013)**

Going Forward

- **Conduct baseline and area-specific inspections**
 - **Safety Culture**
 - **Corrective Action Program**
 - **Evaluation of degraded/non-conforming conditions**

Going Forward (cont.)

- **Continue routine public meetings to provide for open and transparent oversight process**
- **Performance assessment for transition to normal level of regulatory oversight**

References

- **SECY-14-0035, “Annual Report to the Commission on Licensee Performance in the Materials and Waste Programs Fiscal Year 2013”**
<http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2014/2014-0035scy.pdf>
- **SECY-14-0042, “Fiscal Year 2013 Results of the Industry Trends Program for Operating Power Reactors”**
<http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2014/2014-0042scy.pdf>
- **SECY-14-0047, “Reactor Oversight Process Self-Assessment for Calendar Year 2013”**
<http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2014/2014-0047scy.pdf>

List of Acronyms

- **CAL – Confirmatory Action Letter**
- **FSME – Office of Federal and State Materials and Environmental Management Programs**
- **IP – Inspection Procedure**
- **LPCI – Low Pressure Core Injection**
- **NMED – Nuclear Material Events Database**
- **NRC – U.S. Nuclear Regulatory Commission**

List of Acronyms (cont.)

- **RII – Regional Office II**
- **RIV – Regional Office IV**
- **ROP – Reactor Oversight Process**
- **SCCI – Substantive Cross-Cutting Issue**
- **SECY – Office of the Secretary**
- **SL – Severity Level**

OPTIONAL BACKGROUND SLIDE

Watts Bar 2 Milestones

- **Advisory Committee on Reactor Safeguards Meeting (Aug./Sept. 2014)**
- **Commission Meeting (Oct. 2014)**
- **Commission Vote Paper – Issuance of Operating License (Nov. 2015)**
- **Final Readiness Letter and decision on Full Power License (Feb. 2015)**
- **Commercial Operation (Dec. 2015)**