



Briefing on Results of the Agency Action Review Meeting

June 2, 2016

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**Executive Director for
Operations**

Agency Action Review Meeting Objectives

- **Review licensees with performance issues**
- **Review nuclear materials and waste program performance**
- **Review effectiveness of the ROP and cROP**
- **Review industry performance trends**

Agenda

- **Reactor licensee Discussions**
 - **Arkansas Nuclear One – Marc L. Dapas, Region IV**
 - **Pilgrim – Daniel H. Dorman, Region I**
- **Materials and Waste Performance Trends – Daniel Collins, NMSS**
- **Reactor Oversight Process Program Performance – Scott A. Morris, NRR**

Review of Performance at Arkansas Nuclear One

Marc L. Dapas
Regional Administrator, RIV

Column 4 Inputs

- **Yellow Finding: Stator drop event (1st Quarter 2014)**
- **Yellow Finding: Flood protection deficiencies (3rd Quarter 2014)**
- **White Performance Indicator (Unit 2): Unplanned Scrams (2nd and 3rd Quarter 2014)**

Findings from 95003 Inspection

- **The White unplanned scrams PI was adequately addressed**
- **Corrective actions for Yellow flood protection finding potentially created new problems**
- **Additional actions to improve contractor oversight needed**

Inspection Findings (cont.)

- **Incomplete evaluation of causes for safety culture weaknesses**
- **Limited actions to address risk recognition/management**
- **Training/benchmarking not leveraged**

Inspection Findings (cont.)

- **Engineering program implementation problems**
- **Operating experience program challenges**

Causes for Performance Decline

- **Multiple resource reductions**
- **Staff turnover/loss of experience**
- **Ineffective monitoring/oversight by site and corporate leaders**
- **Declining corrective action program effectiveness**

Improvements Noted

- **Improved decision making and communications**
- **Operations Department is driving higher standards across the station**
- **Corrective Action Program rigor is improving**

Current Status-Moving Forward

- **NRC Review of Comprehensive Recovery Plan**
- **Developing Confirmatory Action Letter**
- **Verify effectiveness of corrective actions through inspections**

Closing Thoughts

- **ANO continues to operate with adequate safety margins**
- **Reasonably comprehensive “discovery” effort**
- **NRC identified some gaps**
- **Gaps addressed in Recovery Plan**

Review of Performance at Pilgrim Nuclear Power Station

**Daniel H. Dorman
Regional Administrator, RI**

Column 3 Performance Deficiencies

- **Degraded Cornerstone Column (since 4th Quarter 2013)**
- **Two White Pls: Unplanned Scrams, Unplanned Scrams with Complications**

Column 4 Performance Deficiencies

- **Two White Parallel Findings:**
 - **Inadequate corrective Actions for the two White Pls**
 - **Did not meet Inspection Procedure 95002 Objectives**
 - **Remained in the Degraded Cornerstone column for more than five quarters**

Pilgrim Performance Problems

- **White Finding in September 2015 for not identifying and correcting a safety relief valve failure**
- **White Finding combined with performance within the Degraded Cornerstone for more than five quarters**
- **Led to Pilgrim performance transition to Column 4**

Oversight Actions Comprehensive

- **Ensure adequate safety margins maintained**
- **Completed IP 95003 Phases A & B to:**
 - **Ensure significant issues in CAP are being appropriately addressed, and**
 - **Interim licensee actions arresting CAP performance declines**

Oversight Actions Comprehensive (cont.)

- **Increased Problem Identification and Resolution samples on previously identified licensee performance issues**
- **Additional Resident Inspector was assigned to site**
- **Quarterly Assessments – increased management oversight**
- **Current regulatory actions are adequate**

Future Oversight Activities

- **Supplemental IP 95003 Phase C**
 - **Most significant Phase of 95003**
 - **Conducted after licensee declares readiness**
 - **Ensures underlying causes understood**
 - **Ensures appropriate plan to address issues**

Future Oversight Activities (cont.)

- **Develop and issue Confirmatory Action Letter**
- **Conduct inspections to verify effectiveness of corrective actions and close out CAL**

Closing Thoughts

- **Pilgrim continues to operate with adequate safety margins**
- **Enhanced oversight has identified no new significant issues**
- **Entergy's efforts to assess the causes of declining performance and establish a performance improvement plan are ongoing**

Nuclear Materials and Waste Program Performance

**Dan Collins, Director
Division of Materials Safety, State, Tribal, and
Rulemaking Programs
Office of Nuclear Material Safety and
Safeguards**

Performance Evaluation Process – Key Aspects

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

Use Predefined Performance Criteria

- **Trending review of NMED data**
- **Abnormal Occurrences**
- **Significant enforcement actions**
- **Strategic Goals and Performance Measures**

Met Strategic Goals

- **No nuclear materials licensees met the AARM discussion criteria**
- **Materials program met safety and security performance metrics**
- **No significant trending issues**
- **No significant NRC program issues**

No Significant Performance Trends Identified

- **489 NMED events**
- **17 AOs**
- **Event numbers small compared to the millions of uses**

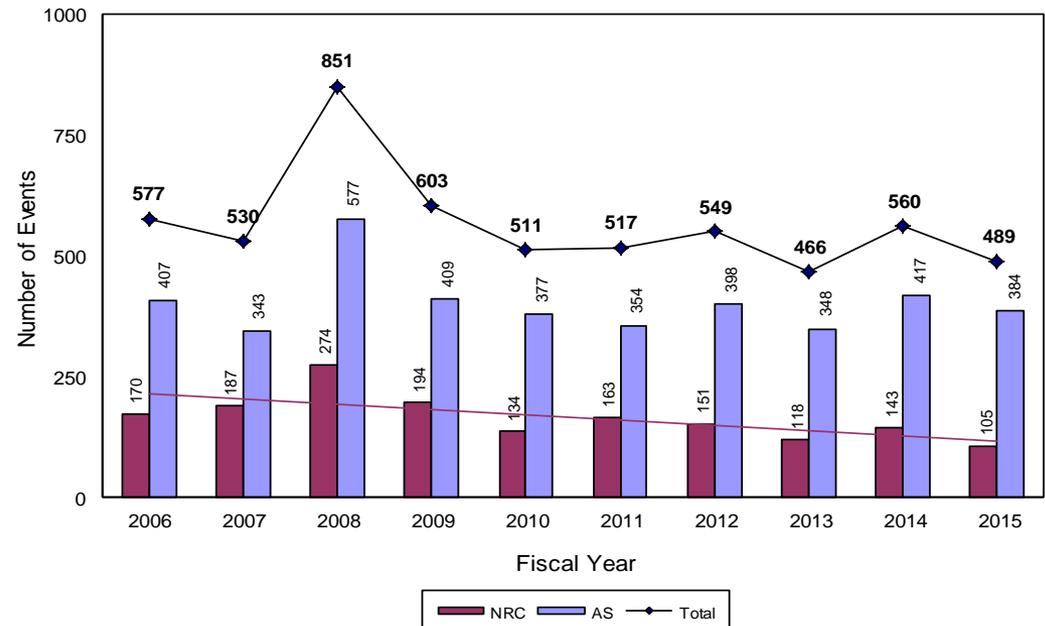


Figure 1. All NMED Events (5,653 total) from SECY 16-0050, “Annual Report to the Commission on Licensee Performance in the Materials and Waste Programs Fiscal Year 2015”

Relatively Few Category 1 & 2 Lost/Abandoned/Stolen (LAS) Events in last 10 years

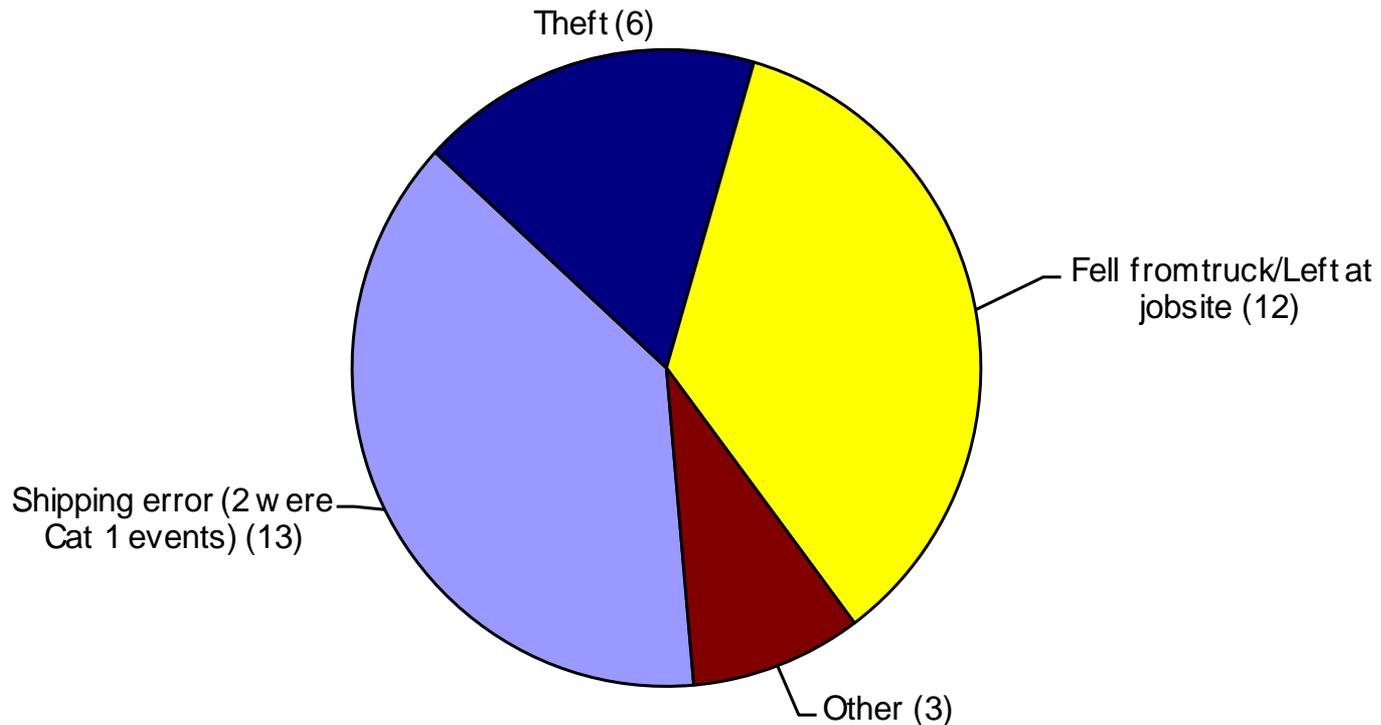


Figure 1- LAS Category 1 and 2 Events Loss Type (Cat 1- 2 events; Cat 2- 32 events; 34 total events).

Closing Thoughts

- **All Strategic Goals were met**
 - **No nuclear materials licensees met the AARM discussion criteria**
 - **Materials program met safety and security performance metrics**
 - **No significant trending issues**
 - **No significant NRC program issues**

Reactor Oversight Process Program Performance

**Scott A. Morris, Director
Division of Inspection and
Regional Support
Office of Nuclear Reactor Regulation**

Overview

- **Industry Trends Program Results**
- **ROP Self-Assessment Program Changes**
- **Self-Assessment Results**
- **Status of ROP Enhancements**

No Industry Trends in 2015

- **No short-term indicator prediction limits exceeded**
- **No “Baseline Risk Index for Initiating Events” thresholds exceeded**
- **No statistically-significant long-term adverse trends requiring generic action**

Industry Trends Program Being Sunset

- **Result of Project Aim re-baselining initiative**
- **Opportunities remain to identify adverse industry performance trends**

Revised Self-Assessment Approach Adds Accountability and Focus

- **Three major elements**
 - **Assess adherence to ROP governance using metrics**
 - **Assess recent ROP revisions to evaluate effectiveness**
 - **Perform targeted, in-depth assessment and peer reviews**

Implementing New Self-Assessment Program in Phases

- **Performed limited self-assessment in 2015**
 - **Metrics and program evaluations from Element 1**
 - **Status of improvements from Element 2**
- **Will complete ROP change effectiveness reviews, focused assessments and peer review in 2016**
- **Will document full 2016 self-assessment in early 2017**

Satisfactory Self-Assessment Results in 2015

- **Performance Metrics**
 - **All but one metric met**
 - **SDP timeliness metric missed**
- **Program evaluations completed**
- **Status of ROP improvements**
 - **Several improvements made**

Action Matrix Deviations Used Effectively

- **Only one new deviation in 2015**
 - **Monticello**
- **No programmatic changes to ROP needed**
- **Only 23 deviations since ROP inception**

2015 Self-Assessment: ROP Met Program Goals

- **Met program goals and achieved intended outcomes**
- **Ensured openness and effectiveness**
- **Remained objective, risk-informed, understandable, and predictable**
- **Several improvements implemented based on lessons learned and feedback from stakeholders**

Numerous ROP Enhancements Completed in 2015

- **Improved numerous baseline inspection procedures**
- **Modified Cross-Cutting Issue process**
- **Changed Action Matrix criteria for “degraded cornerstone”**
- **Improved ROP communications**
- **Redesigned Self-Assessment Process**

Additional ROP Enhancements Scheduled for 2016

- **Revise Component Design Basis Inspection procedure**
- **Clarify inspection issue screening process**
- **Streamline SDP to improve timeliness**
- **Clarify dual-path pursuit of ROP and Traditional Enforcement issues**
- **Streamline inspection report content and process**
- **Continue AP1000 ROP development**

Conclusion

- **Senior NRC managers affirmed the appropriateness of agency actions**

List of Acronyms

- **AARM – Agency Action Review Meeting**
- **ANO – Arkansas Nuclear One**
- **AO – Abnormal Occurrence**
- **AS – Agreement States**
- **CY – Calendar Year**
- **CAL – Confirmatory Action Letter**
- **CAP – Corrective Action Program**

List of Acronyms (cont.)

- **cROP – Construction Reactor Oversight Process**
- **FY – Fiscal Year**
- **IP – Inspection Procedure**
- **NMED – Nuclear Materials Event Database**
- **NMSS – Office of Nuclear Material Safety and Safeguards**
- **NRC – U.S. Nuclear Regulatory Commission**

List of Acronyms (cont.)

- **NRR – Office of Nuclear Reactor Regulation**
- **PI – Performance Indicator**
- **ROP – Reactor Oversight Process**
- **SDP – Significance Determination Process**