BRIEFING ON THE RESULTS OF THE AGENCY ACTION REVIEW MEETING JULY 11, 2024

Scott Morris, Deputy Executive Director for Reactor and Preparedness Programs

SCOTT RUTENKROGER SENIOR RESIDENT INSPECTOR PEACH BOTTOM POWER PLANT

AGENCY ACTION REVIEW MEETING (AARM) OBJECTIVES

Review the appropriateness of NRC actions taken for licensees with significant performance issues

Review Nuclear Materials and Waste Safety Program Performance and Trends

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3

Review effectiveness of the Reactor Oversight Process (ROP) and the Construction ROP

Ensure that trends in licensee performance are recognized and appropriately addressed

AGENDA

ANDREA VEIL – DIRECTOR, OFFICE OF NUCLEAR REACTOR REGULATION

- Resident Inspector Program Update

KEVIN WILLIAMS – DIRECTOR, DIVISION OF MATERIALS SAFETY, SECURITY, STATE, AND TRIBAL PROGRAMS, OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

- NUCLEAR MATERIALS AND WASTE SAFETY PROGRAM PERFORMANCE AND TRENDS

PAT FINNEY – SENIOR RESIDENT INSPECTOR, HOPE CREEK NUCLEAR GENERATING STATION, REGION I

- CY 2023 ROP SELF-ASSESSMENT RESULTS
- CY 2023 CONSTRUCTION ROP SELF-ASSESSMENT

NINE MIILE POINT AND FITZPATRICK POWER PLANTS

RESIDENT INSPECTOR PROGRAM UPDATE

ANDREA VEIL DIRECTOR, OFFICE OF NUCLEAR REACTOR REGULATION

ANDREW PATZ AND DREW CHILDS RESIDENT INSPECTORS WATERFORD POWER PLANT

RI Turnover by Year



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SRI Turnover by Year



Average RI Experience by Year



Average SRI Experience by Year



ANALYSIS OF RESIDENT INSPECTOR SITE STAFFING





SURVEY RESULTS

Satisfaction



WRITTEN FEEDBACK

- Positive feedback on RI Retention Incentive.
- MOVING EVERY 7 YEARS MAKES THIS JOB DIFFICULT.
- The Resident Program NEEDS MORE LEADERSHIP SUPPORT TO MAKE RI JOBS EASIER.

RESIDENT RESIDENT INSPECTOR

"Being a resident inspector lets me see firsthand, every day, the impact resident inspectors and the NRC's regulations have on ensuring the safe and secure operation of nuclear power plants. We really are the agency's boots on the ground."

> ASHLEY DEMETER Resident inspector Byron Nuclear Power Plant Illinois



LEVERAGING RI EXPERIENCE

- 4 FORMER SRIS PROMOTED TO BCs in 2023
- NUMBER OF SESS WITH RI EXPERIENCE INCREASED
 SLIGHTLY IN 2023 AFTER A DROP IN 2022
- 6 FORMER SRIS GRADUATED SESCDP

RESIDENT RESIDENT RESIDENT RESIDENT RESIDENT

"Over the last 8 years as resident and senior resident inspector, I have seen the importance of being in the field both with and without the licensee. Not only do we provide observations while inspecting activities such as maintenance and testing, we also independently identify issues during our daily plant walkdowns. Our dedication to safety directly supports the NRC's mission."

> CHRIS HIGHLEY Senior resident inspector Columbia generating station Washington



REGIONAL ENGINEERING INSPECTION STAFFING

- BIGGEST CHALLENGE IS NEED TO QUALIFY NEW INSPECTORS VS LACK OF ABILITY TO HIRE
- HQ PROVIDED 40 WEEKS WORTH OF TEAM INSPECTIONS SUPPORT IN 2023 AND 2024
- 8 CONTRACTORS PER YEAR

UNIQUE CHALLENGES FOR REGIONAL INSPECTORS

- Over 25 percent travel time
- Specialized inspection qualifications require 1.5-2 yrs to support inspections

FOCUS AREA FOR THE REGIONAL ROP SELF ASSESSMENT AUDIT THIS YEAR

RESIDENT INSPECTOR

"When I was a resident inspector at Wolf Creek, I found that the NRC's onsite presence and day-to-day interaction with the licensee had a positive influence on licensee behavior and strengthened nuclear safety. This experience also provided a very helpful perspective for my current role as a reactor engineering inspector."





ACCOMPLISHMENTS AND PATH FORWARD

- ACCOMPLISHMENTS
 - Trust Huddle
 - RETENTION INCENTIVE
 - 50th Anniversary Celebration
- FUTURE WORK
 - Incentive Reviews and Renewal
 - Standing Committee/Regional/OEDO continued focus – added to QPR

RESIDENT INSPECTOR

"We have such a profound impact on safety as resident inspectors. There is nothing more rewarding than seeing the results from our engagement in our daily walkdowns, our inspections and response to events."

> ERIC MILLER Senior resident inspector Fitzpatrick nuclear power plant New york



Nuclear Materials and Waste Safety Program

Kevin Williams, Director

Division of Materials Safety, Security, State, and Tribal Programs

Office of Nuclear Material Safety and Safeguards

KIMYATA MORGAN BUTLER & ELIZABETH TINDLE-ENGELMANN REGION III Licensee Performance in the Nuclear Materials and Waste Safety Program

Systematic review of information to identify significant regulatory issues.

- No licensee performance issues
- No generic issues
- No Part 21 reports
- No NRC program issues/gaps

No nuclear materials licensee met the significant performance issue criteria in SECY-11-0132 for FY 2023.



Safety and Security Goals

Met the performance goals for both safety and security, with no occurrences which met the reporting criteria.

NRC Strategic Goals

- Ensure the safe and secure use of radioactive materials.
- Continue to foster a healthy organization.
- Inspire stakeholder confidence in the NRC.



MICHAEL WUTKOWSKI & MICHAEL REICHARDS HEALTH PHYSICS INSPECTORS

Decreasing Trend of Events for Nuclear Materials Users



Events

Nuclear Materials Users had 376 event notifications and 17,698 licensees in FY23.

Fuel Facilities reported 15 events (8 facilities). This was an increase over last year, but no increasing trend was identified. No action is needed.

Spent Fuel Storage and Transportation licensees reported 4 events and no trend was observed.

Low-level Waste, Uranium Recovery Sites, and Complex Material Decommissioning had no events.

Decommissioning Reactors had 2 events.

ANTHONY MASTERS & NICK PETERKA DIVISION OF FUEL FACILITY INSPECTION REGION II

Abnormal Occurrences

7 medical events 1 embryo/fetus overexposure 3 events with industrial radiography cameras

All Abnormal Occurrence are from the Nuclear Materials Users business line.

Number of medical events is small relative to the millions of procedures involving the use of radioactive material.



ANDY HALLORAN AGREEMENT STATE INSPECTOR WASHINGTON

Escalated Enforcement Actions in FY23



Escalated Enforcement Actions includes Severity Level I, II and III Violations and Problems, Confirmatory Orders, and Orders.

In FY23, there were no Severity Level I violations or problems within these business lines.

National Materials Program

Agreement State Performance

- 35 Agreement States Adequate to Protect Public Health and Safety.
- 4 Agreement States Adequate, But Needs Improvement (AR, MS, NY, WA)
- No Agreement States are Not Adequate.

Oversight

- Arkansas Heightened Oversight (2024)
- Mississippi Heightened Oversight (2023)
- New York Heightened Oversight (2022)
- Washington Heightened Oversight (2022)

No Agreement States are currently on probation.



INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM (IMPEP) EXIT MEETING NEW JERSEY



Enhancing the ISFSI Inspection Program

The self-assessment covered:

- ISFSI Inspection Program in 2021 and 2022.
- An assessment of the implementation of changes made to the program, which followed an enhancement initiative.
- Cross qualification program.

A Successful 2023

- No trends requiring action.
- Collaboration and coordination with the regions and Agreement States.
- Continued focus on strengthening community and culture.



SPEED MEET AND GREET: A PROFESSIONAL NETWORKING EVENT IN NMSS

REACTOR OVERSIGHT PROCESS

Patrick Finney, Senior Reactor Inspector Hope Creek Nuclear Generating Station

USNRC

PAUL CATALDO SENIOR REACTOR INSPECTOR SEABROOK POWER PLANT

JASON SCHUSSLER SENIOR RESIDENT INSPECTOR GINNA POWER PLANT

ROP SELF-ASSESSMENT PROGRAM

Did the ROP meet its program goals?

Did the ROP meet its intended outcomes?

Was the ROP implemented per current gov ernance documents, and was it implemented uniformly across all offices and regions?

ROP Self-Assessment Program Did ROP execution adhere to the Principles of Good Regulation?

JUSTIN FULLER SENIOR RESIDENT INSPECTOR MILLSTONE POWER PLANT

CY 2023 ROP SELF-ASSESSMENT RESULTS

- THE ROP PROVIDED EFFECTIVE OVERSIGHT OF OPERATING REACTORS
- THE ROP WAS IMPLEMENTED IN ACCORDANCE WITH THE PRINCIPLES OF GOOD REGULATION (INDEPENDENCE, CLARITY, OPENNESS, RELIABILITY, AND EFFICIENCY)
- THE ROP SUPPORTS THE AGENCY'S STRATEGIC GOALS:
 - To ensure the safe and secure use of radioactive materials
 - To inspire stakeholder confidence in the NRC



TIM DEBEY, RUSS BYWATER AND NATHAN BROWN RESIDENT INSPECTORS ARKANSAS NUCLEAR ONE POWER PLANT

ROP SELF-ASSESSMENT ACTIVITIES IN CY 2023

Element 1 - Regional and Headquarters Program Effectiveness and Uniformity in Implementing the ROP

ROP Performance Metrics
ROP Data Trending Focus Areas
ROP Program Area Evaluations

Element 2 -Effectiv eness of Recent ROP Changes and Evaluate the NRC's Response to Significant Licensee Events or Declining Licensee Performance

• Effectiv eness Review of the Incorporation of Safety Culture into the ROP

Element 3 - Focused Assessments of Specific ROP Program Areas, Including the Baseline Inspection Program

• Baseline Inspection Program Routine Monitoring

CY 2023 ROP PERFORMANCE METRICS RESULTS

IMC 0307, APPENDIX A
17 ROP PERFORMANCE METRICS
2 YELLOW
RESIDENT SITE STAFFING
SDP COMPLETION TIMELINESS
15 GREEN

NRC INSPECTION MANUAL

IRSB

INSPECTION MANUAL CHAPTER 0307 APPENDIX A

REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT METRICS AND DATA TRENDING

Effective Date: 06/01/2020

This Appendix contains a description of each of the Reactor Oversight Process (ROP) performance metrics and data trending as described in Sections 06.01(a) and (b) of Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program." The objectives, applicability, and requirements in IMC 0307 apply to this Appendix.

The objective performance metrics and data trending are organized by the Principles of Good Regulation as described in Section 05.02 of IMC 0307, which include independence, openness, efficiency, clarity, and reliability. Additional detail related to the specifics and basis of the metrics can be found in the reference documents noted in the Basis section of each metric. The ROP Goals and ROP intended outcomes (see Sections 05.01 and 05.03, respectively, of IMC 0307) related to each metric are also provided. Of note, data trending focus areas do not reference bases documents, and do not have performance thresholds, as they are designed to allow flexibility in data monitoring and analysis. The ROP performance metrics are tracked and reported on a calendar year basis. ROP performance metrics reporting requirements are outlined in IMC 0307, Section 07.01.

In general, the ROP objective performance metrics are defined and measured at the Agency-wide level, though many of the metrics also analyze the data by region and/or office for comparison purposes and to ensure uniform and effective program implementation. The regional and/or office goals for a given metric are provided in the notes beneath the Agency-wide criteria, when applicable. To ensure consistency of collection and reporting of metric data, submittal forms will be used that will specify the data elements that will be needed to calculate the metrics, and periodic audits will be performed to verify data consistency.

The ROP data trending focus areas provide for routine monitoring of associated ROP program execution data for each focus area, looking for significant positive or negative trends (as compared to historical averages or expected trends). While the ROP objective performance metrics are generally measured at the Agency-wide level, the ROP data trending focus areas are purposefully wide-scope, so that flexibility exists for the data to be monitored and analyzed at the appropriate level.

PLANS FOR CY 2024 ROP SELF-ASSESSMENT ACTIVITIES

Measure	Element 1: Measure Regional and Headquarters Program Effectiveness and Uniformity Implementing the ROP • Performance Metrics • Data Trending • Program Area Evaluations (Including Review of Baseline Security SDP) • Implementation Audit of Region III
Assess	Element 2: Assess Effectiv eness of Recent ROP Changes and Evaluate the NRC's Response to Significant Licensee Events or Declining Licensee Performance • Review any insights, trends, or lessons learned in applying the modified ROP for AP1000 units to Vogtle • Lessons Learned Tracker
Perform	 Element 3: Perform Focused Assessments of Specific ROP Program Areas, Including the Baseline Inspection Program Baseline Inspection Procedure (BIP) Monitoring – Rolled out in 2023 beyond DRO. Triennial, focused assessment will include the Baseline Security SDP and working group on the treatment of radiation monitor issues in the emergency preparedness SDP

OTHER ROP UPDATES INCLUDED IN THE SECY

COVID-19 Lessons-Learned for the ROP

Staff Recommendations to the Commission to Revise the ROP

Modernizing ROP Inspection and Assessment through Data Improvements

Construction Reactor Oversight Process

Applying the Modified ROP for AP1000 Units at Vogtle JENNIFER ENGLAND SENIOR RESIDENT INSPECTOR FITZPATRICK POWER PLANT

VOGTLE UNIT 4

CONSTRUCTION REACTOR OVERSIGHT PROCESS



CY 2023 CONSTRUCTION REACTOR OVERSIGHT PROCESS (CROP) SELF-ASSESSMENT RESULTS

VOGTLE UNIT 4 AFFIRMATIVE 52.103(G) FINDING



SCOTT EGLI SENIOR CONTRUCTION INSPECTOR VOGTLE UNIT 4 NICOLE COOVERT AND LUIS COLON FUENTES BRANCH CHIEF AND CONSTRUCTION INSPECTOR VOGTLE UNIT 4

CONSTRUCTION REACTOR OVERSIGHT PROCESS

• Effective in meeting its goals

 No Construction Action Matrix deviations in CY 2023

began April 2024

Approximately 54,000 hours of direct inspection at Vogtle as of end of 2023
Commercial operation

CONSTRUCTION LESSONS LEARNED

- Leveraging staff's extensive experiences
- 10 CFR Part 52 Construction Lessons-Learned Report, dated January 16, 2024
- Comprehensive public meeting on February 14, 2024, to present the report

DATE OF CONTRACT OF CONTRACT. TOM FREDETTE **REACTOR OPERATIONS ENGINEER VOGTLE UNIT 4**

RAJU PATEL SENIOR CONTRUCTION INSPECTOR VOGTLE UNIT 4

CLOSING REMARKS SCOTT MORRIS

AUTIO

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RJ

DON KRAUSE AND AYESHA ATHAR RESIDENT INSPECTORS DIABLO CANYON POWER PLANT

LIST OF ACRONYMS

- 52.103(G) OR 103(G) TITLE 10 OF THE CODE OF FEDERAL REGULATIONS SECTION 52.103(G)
- AARM AGENCY ACTION REVIEW
 MEETING
- COVID-19 CORONAVIRUS DISEASE 2019
- CROP CONSTRUCTION REACTOR OVERSIGHT PROCESS
- CY CALENDAR YEAR
- DRO DIVISION OF REACTOR OVERSIGHT
- FY FISCAL YEAR

- IMC INSPECTION MANUAL CHAPTER
- IMPEP Integrated Materials Performance Evaluation Program
- IP INSPECTION PROCEDURE
- IMC INSPECTION MANUAL CHAPTER
- ITAAC INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA
- MD MANAGEMENT DIRECTIVE
- NMSS OFFICE OF NUCLEAR

MATERIAL SAFETY AND SAFEGUARDS

- NRC U.S. NUCLEAR REGULATORY COMMISSION
- NRR OFFICE OF NUCLEAR REACTOR REGULATION
- RIDP RESIDENT INSPECTOR DEVELOPMENT PROGRAM
- ROP REACTOR OVERSIGHT PROCESS
- RTR RESEARCH AND TEST REACTOR
- SDP Significance Determination Process