

U.S. Nuclear Regulatory Commission Update

*Regulatory Issues, Lessons Learned, and
Potential Areas for Improvements*

Robert Lewis, Director

**Division of Preparedness and Response
Office of Nuclear Security and Incident Response**

Highlights

- Inspection insights
- Exercise critiques
- HAB exercise observations
- Protective action recommendations
- Event notifications, classifications, and findings

Region I Update

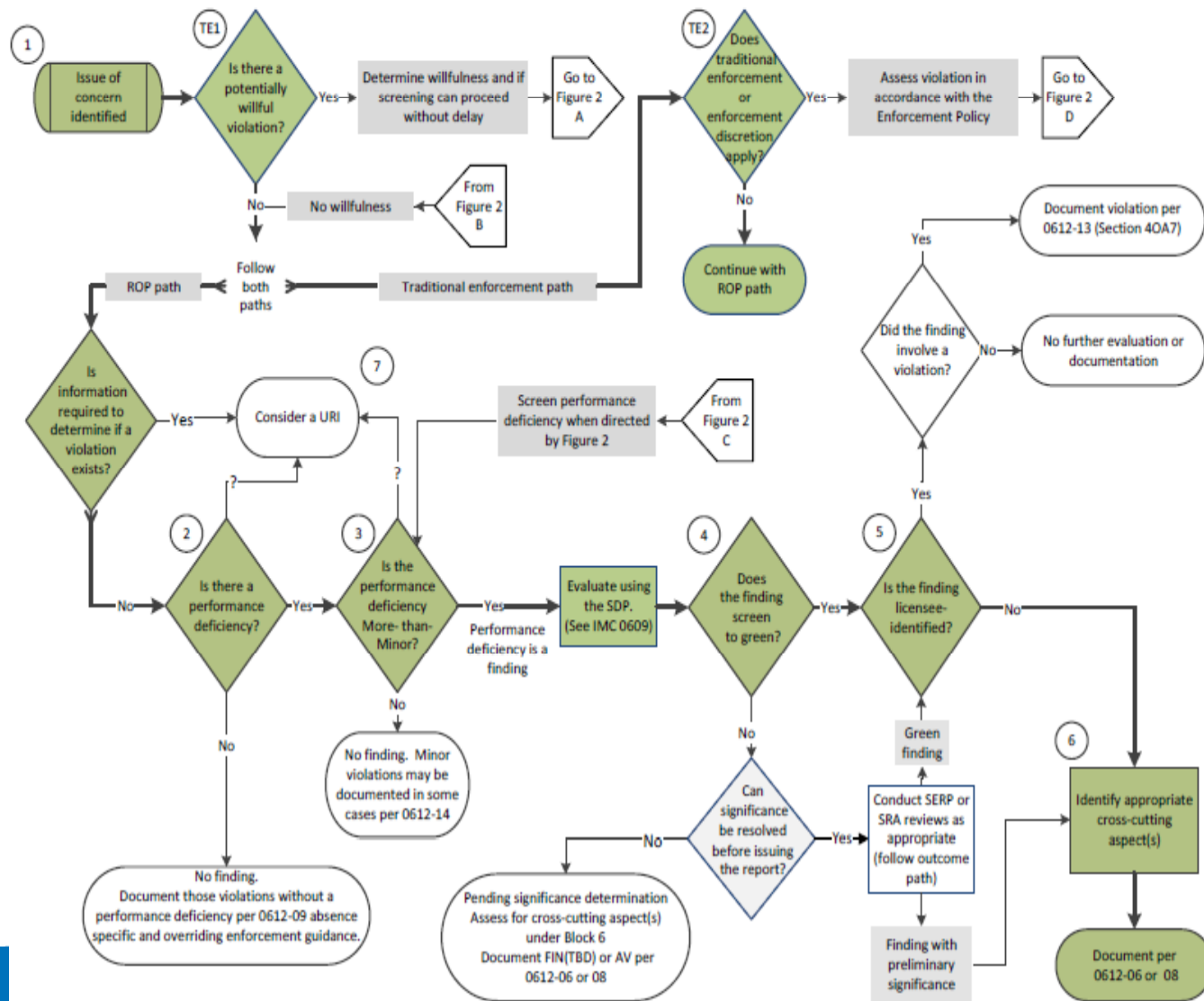
*Steve Barr, Senior EP Inspector
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Region I Update

- Finding Categories
 - EALs
 - Equipment/Compensatory Measures
 - Keeping E-Plan Current
 - Drill Critiques

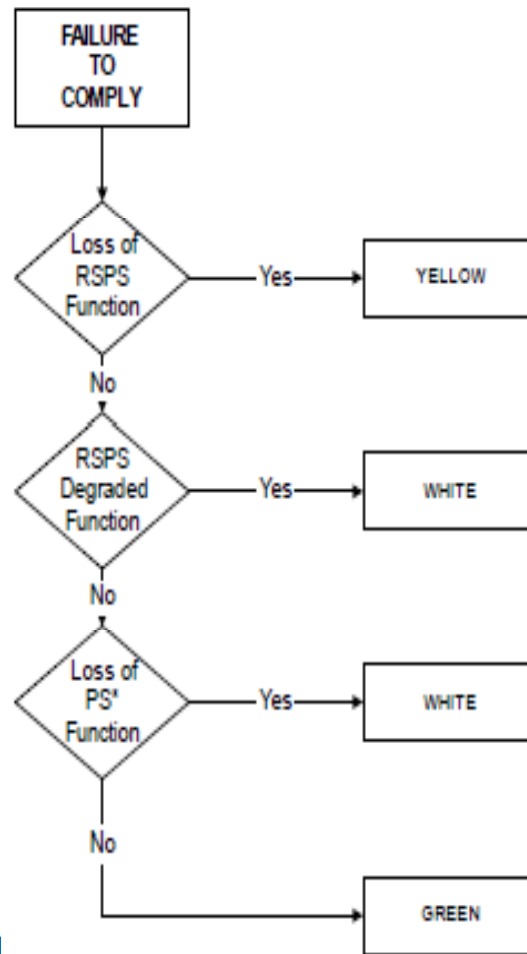
Region I Update

Figure 1: Issue Screening



Region I Update

Attachment 2
FAILURE TO COMPLY SIGNIFICANCE LOGIC



Region I Update

- Near Misses
 - Dose Assessment Critique
 - Fire vs. Explosion Declaration
 - Toxic Gas “Normal Ops”
 - Critique vs. Program Problem

Federal Retirement Option...



4. Deferred retirement

Available when an employee leaves federal service before meeting any immediate retirement option requirements and leave retirement contributions in the fund. Employee will be eligible to collect:

- At age 62, with at least five years creditable civilian service but less than 10.
- At MRSA, with more than 10 years of creditable service. The annuity will be reduced 5 percent for every year under age 62 unless the employee has 30 or more years of service.

Law enforcement officers, firefighters, air traffic controllers, and members of Congress who separate from service subject to FERS for reasons other than misconduct, with 20 years of service under special provisions, may receive a deferred annuity at the MRA with no reduction for age.

With this retirement option, the annuity is commuted based on the high-3 average salary and length of service in effect when the employee left federal service. Neither health insurance nor life insurance is reinstated when the retirement commences.

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Region II Update

*Steve Sanchez, Senior EP Inspector
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Exercise Observations

- HAB exercise inspection observations
- HAB exercise NRC challenges inspection / participation
- Southern Exposure 2015 – EP exercise

Inspection Observations

- Inspection lessons learned / observations
- Recent EP issues / findings

EP / Incident Response

- Temporary Instruction 2515/191,
“Inspection of the Licensee's Responses to
Mitigation Strategies Order EA-12-049, Spent
Fuel Pool Instrumentation Order EA-12-051
and Emergency Preparedness Information
Requested in NRC March 12, 2012”
- Hurricane season preparations

Emergency Preparedness New Reactor Inspections



- New construction sites
 - Watts Barr Unit 2
 - Vogtle / V.C. Summer

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Region III Update

*Steve Orth, Chief
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Agenda

- Introduction
- Timeliness of Event Declarations
- ERO Staffing Changes
- Equipment Reportability
- Summary

Timeliness of Event Declarations

- Section IV.4 of 10 CFR 50 Appendix E
 - Indications to plant operators
 - 15 minute capability
 - “Promptly declare” and “as soon as possible”
- Verification of indications
- Fires

ERO Staffing Changes

- Regulatory Guide 1.219
 - Compliance with planning standard
 - Effectiveness of emergency plan
- ERO staffing changes
 - Functions and tasks analysis
 - Position qualifications and capabilities

Reporting Equipment Issues

- NUREG-1022, Rev 3, Supplement 1
- Major Loss
 - Initiating condition
 - EALs – redundant or assess different conditions
- Planned vs Unplanned Loss
 - Compensatory measures

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Region IV Update

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Topics

- HAB observations
- Protective Action Recommendation issues
- Changes to the emergency plan and implementing procedures



HAB Observations

- There have been very little that TSCs and OSCs were required to do
 - Same scenarios: Complete loss of offsite power with loss of (all or most) emergency diesel generators, either by direct damage or independent failure
 - Core damage would not occur during the time frame of the exercise (removes urgency/need to make repairs)
 - No other plant damage requiring either engineering evaluation or immediate repair
- There have been some licensees that did not fully evaluate the Security department during the critiques, on topics such as 2-person rule, release of duck/cover, site sweeps, escorting plant personnel, etc.



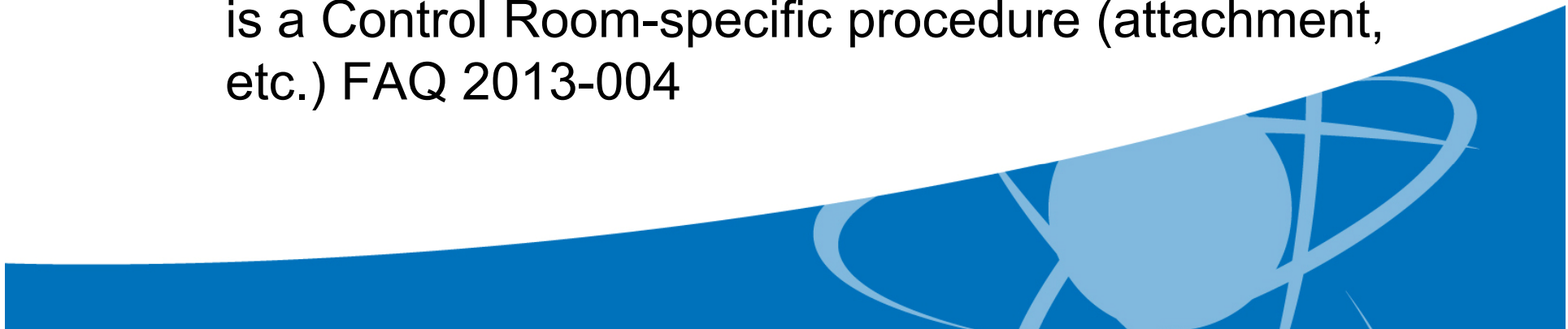
Protective Action Recommendations

- Licensees are responsible to provide a PAR for the entire emergency planning zone, including large bodies of water
 - Offsite authority procedures to take automatic actions do not relieve the licensee of the responsibility to provide the recommendation
 - Should be situational based on current radiological risk



Protective Action Recommendations

- Supplement 3 Implementation
 - Procedures are changing the responsibilities of the Emergency Director in the Control Room
 - Limitations on, or elimination of, a PAR outside of 10 miles
 - Elimination of any follow-up PAR after the initial plant-based PAR
 - The Control Room may not have to evaluate shelter as a PAR under some circumstances, but only if there is a Control Room-specific procedure (attachment, etc.) FAQ 2013-004



Protective Action Recommendations

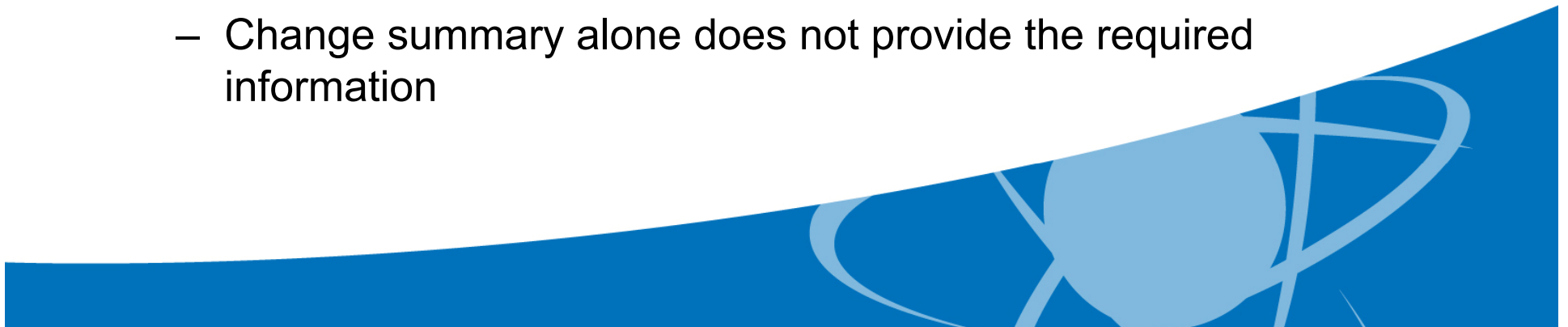
- Procedures are becoming more prescriptive, with less allowance for the subject matter expertise of Emergency Directors and senior Radiation Protection staff (Radiological Managers, Dose Assessors)
 - Simplifies training and exercise evaluation
 - The PAG Manual anticipates that PARs/PADs is an inherently subjective process that requires the use of data, model results, and professional judgment
 - Doing less comparison of dose-avoided by each option
 - Losing an appreciation of model results vs reality
- Emergency Directors at some licensees are approving PARs based on a briefing about a recommendation developed by ERO staff without personally reviewing the data, dose report, procedure, flow-chart, etc.
They are essentially delegating the PAR responsibility



Changes to the Emergency Plan & Implementing Procedures



- Some licensees have not implemented the 10CFR50.54(q)(5) requirement to provide a summary of the analysis to determine whether the change(s) reduce the effectiveness of the plan
 - Statement of no reduction in effectiveness in the cover letter is not enough
 - Justification for making the change is not the same as why effectiveness is not reduced
 - Change summary alone does not provide the required information



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Headquarters Update

Eric Schrader

Emergency Preparedness Specialist

Division of Preparedness and Response

Topics

- EP Discussions
 - 2-Person Rule
 - HG1
- New EP Guidance
 - PARs Over Water RIS
 - NEI 13-01 / NUREG 1022
- EP State of the Union
 - 50.54(q) evaluations / change submittals
 - Event notifications
 - Inspection findings
 - Emergency classifications

EP Discussions

- 2-Person Rule
- HG1

New EP Guidance

- PARs Over Water RIS
- NEI 13-01 / NUREG 1022

EP State of the Union

- 50.54(q) evaluations / change submittals
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Event Notifications

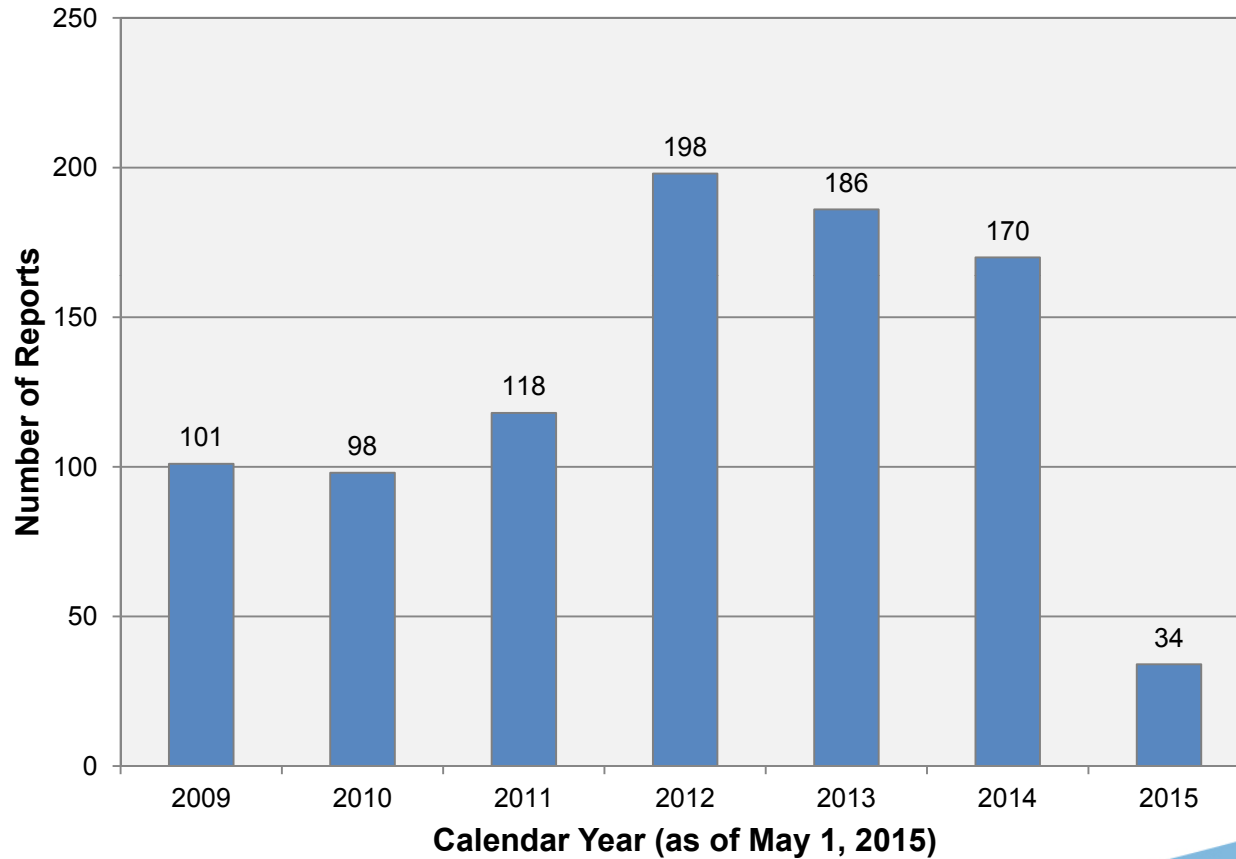
- 10 CFR 50.72(b)(3)(xiii)
 - Eight hour report
 - Major loss
 - Emergency assessment
 - Offsite response
 - Offsite communications

Event Notifications

- Analysis CY 2009 – 2015
- Loss of capability
 - Facility
 - Component/system
 - Equipment
- Unplanned vs planned loss
- Impact of NEI 13-01

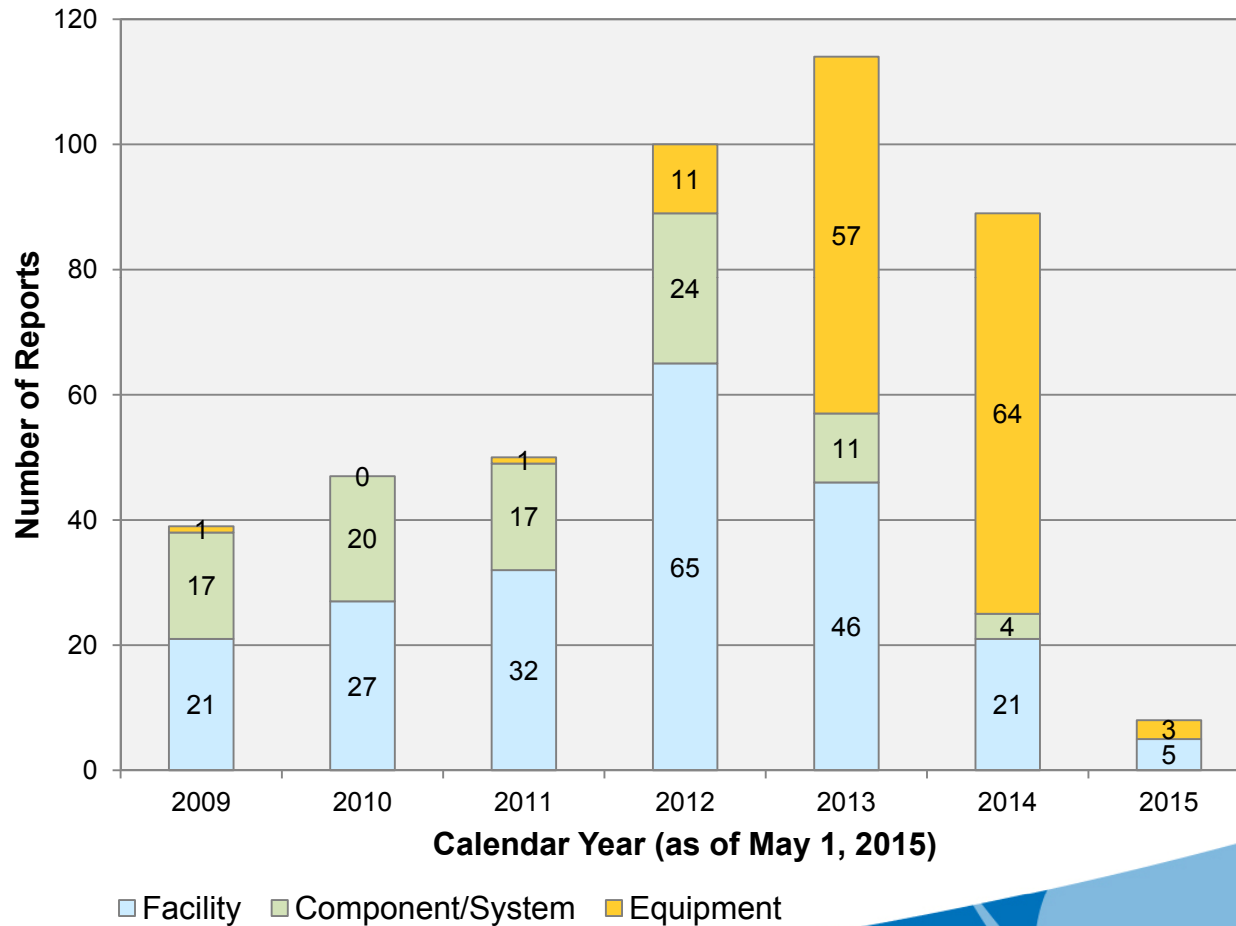
Event Notifications

Event Notifications Per Year



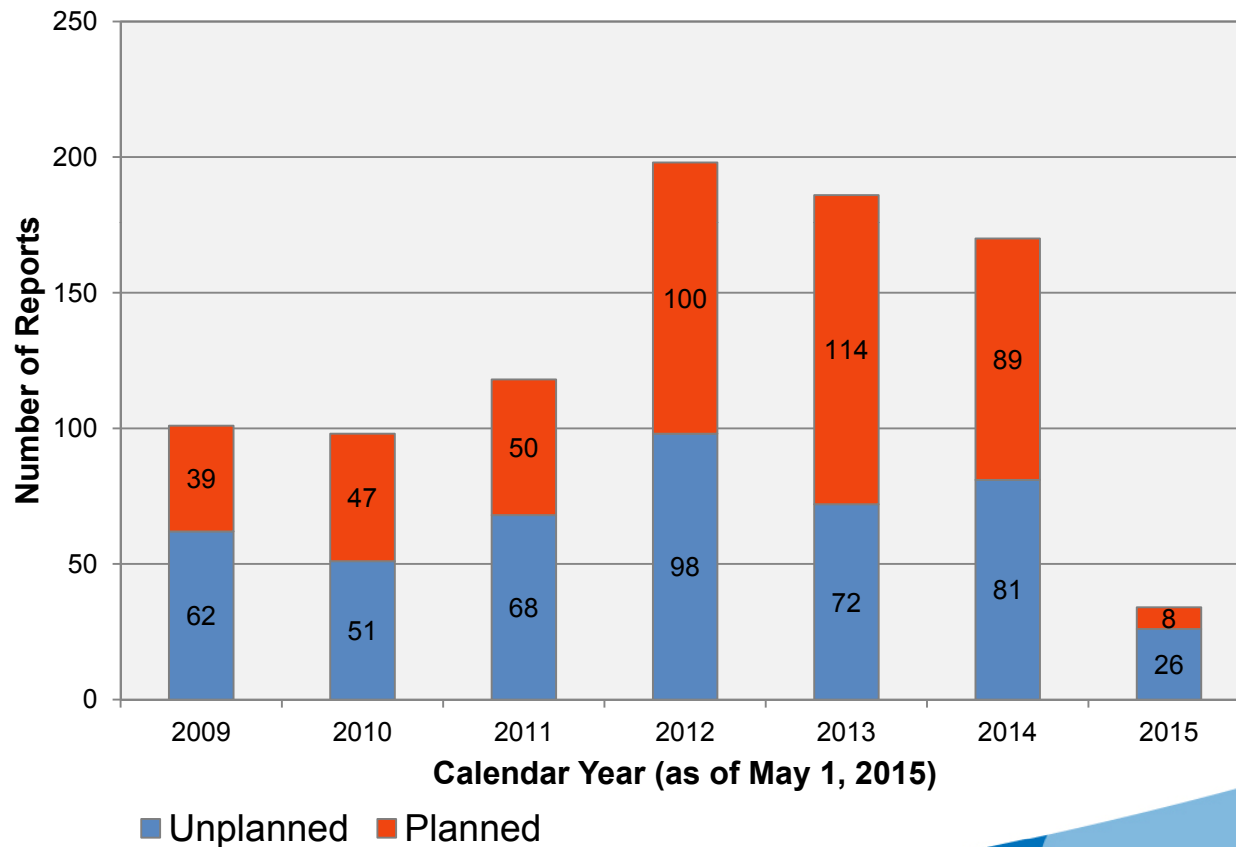
Event Notifications

Planned 50.72(b)(xiii) Event Notifications

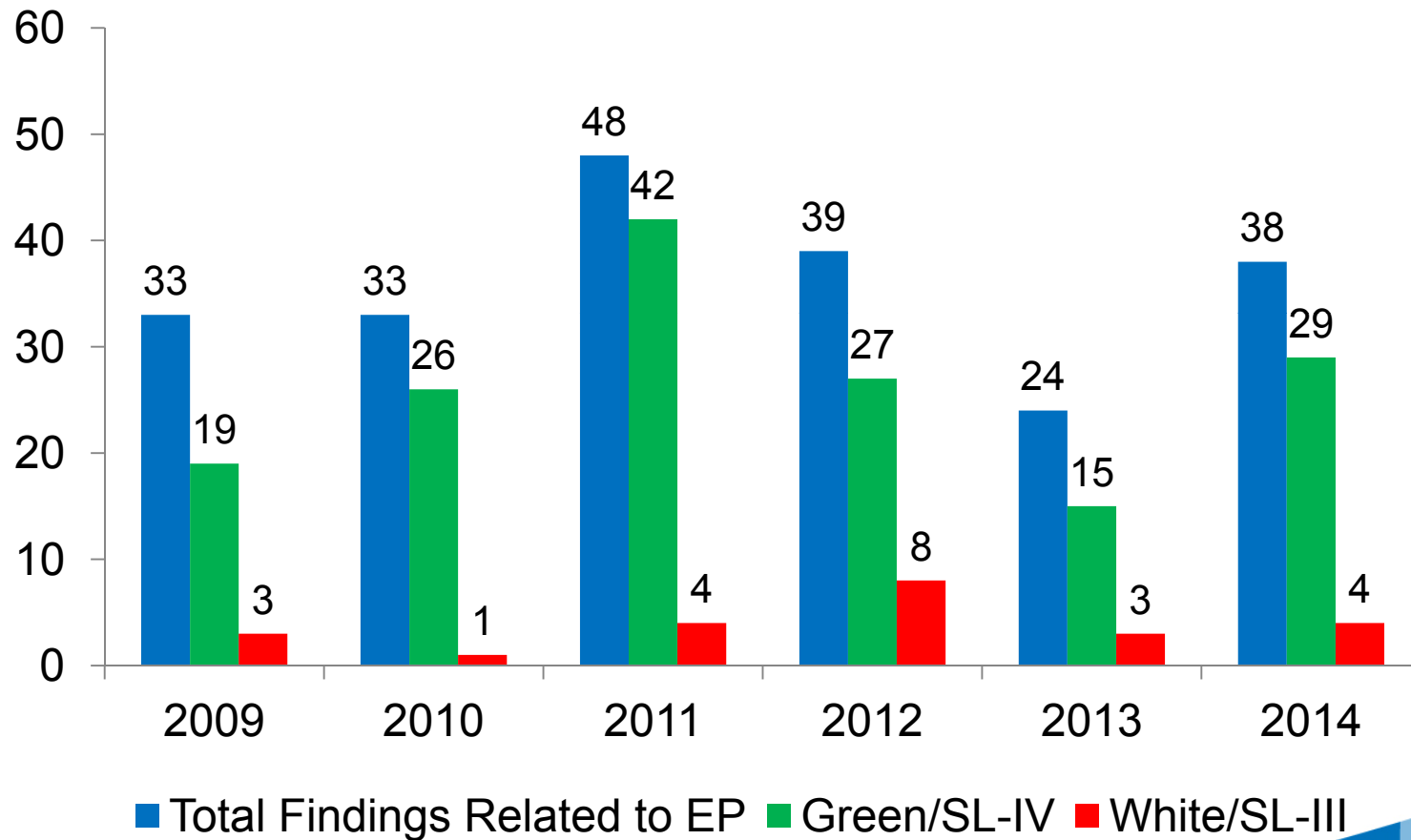


Event Notifications

Unplanned vs Planned Loss Event Notifications



Inspection Findings

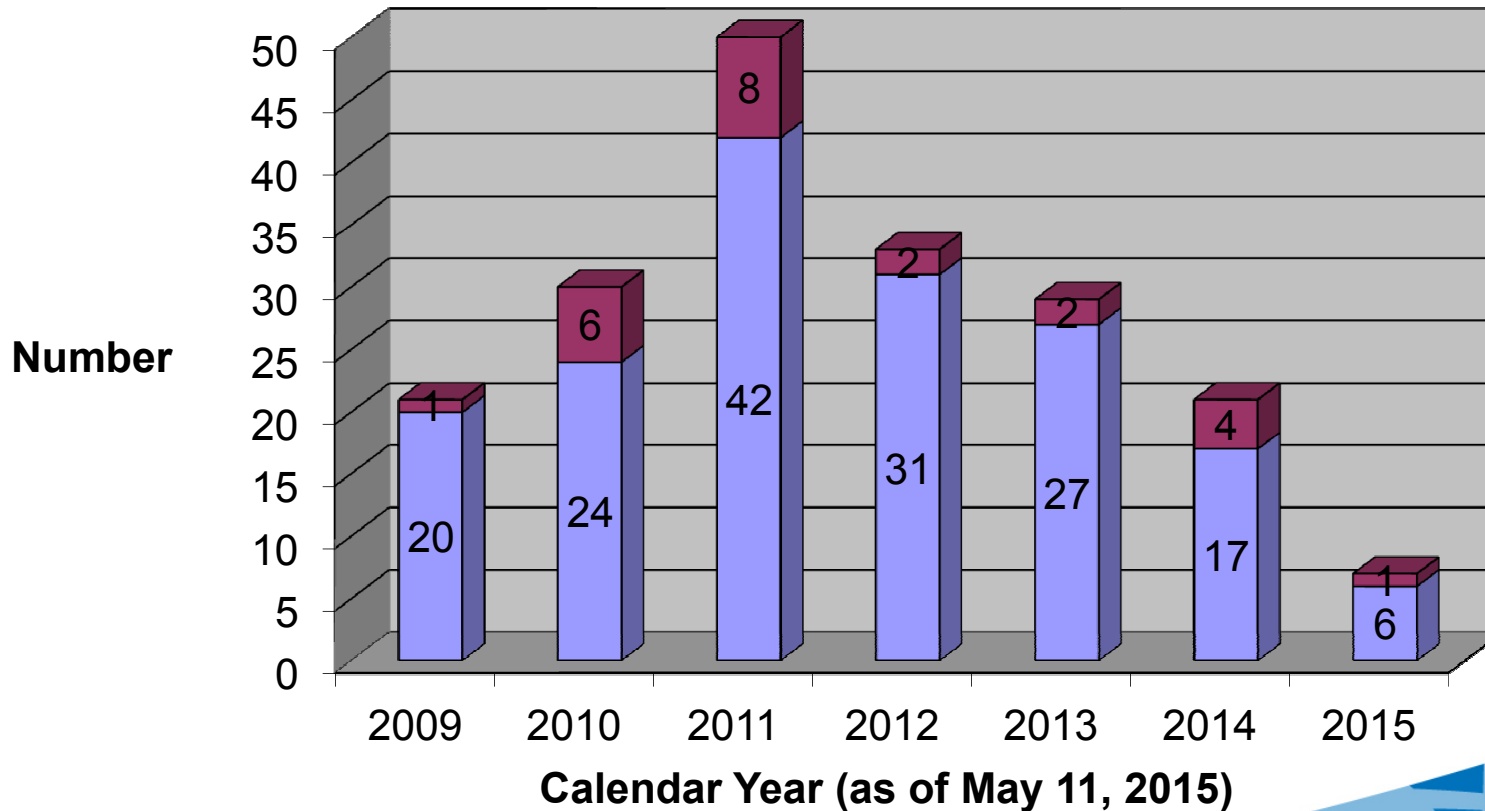


Inspection Findings

- White Significance – ROP
 - Calculation error resulted in significant impact on EAL threshold value
 - Calculation error in EAL threshold would result in over-classification
 - PARs over water

Emergency Classifications

NPP Emergency Declarations



■ Unusual Event ■ Alert ■ Site Area Emergency ■ General Emergency

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