

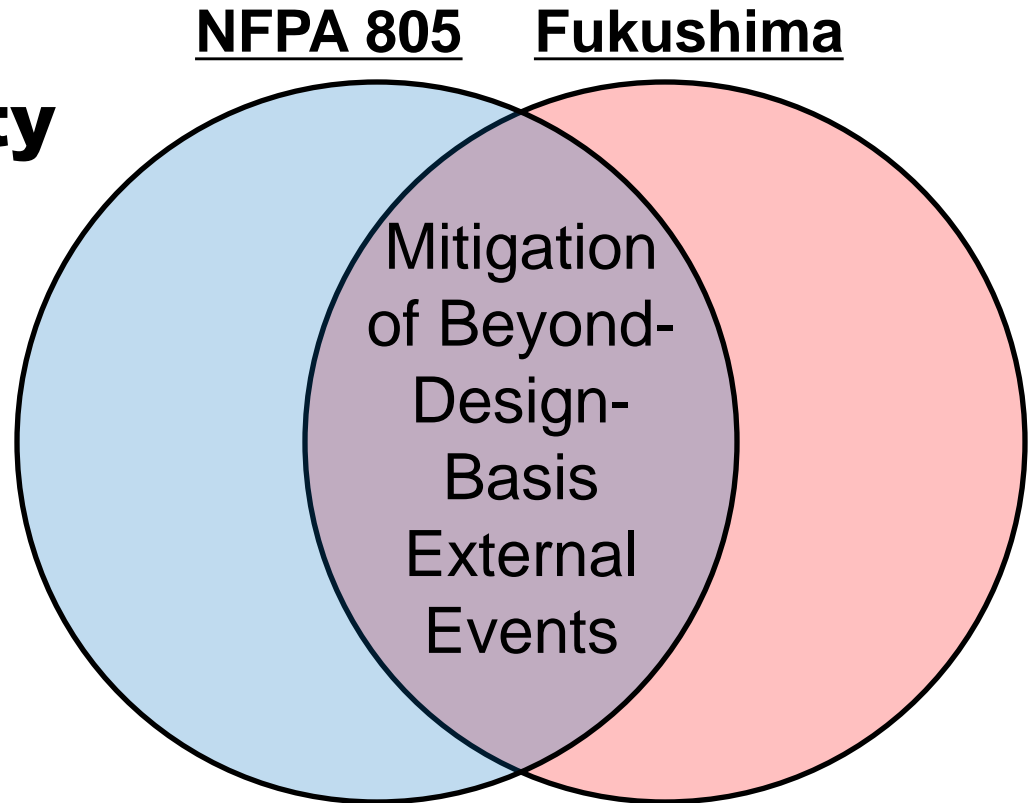


Briefing on National Fire Protection Association (NFPA) Standard 805 Fire Protection

Mark Satorius
Executive Director for Operations, OEDO
June 19, 2014

NFPA 805 Improves Safety

- **Improved Safety**
- **Progress**
- **Challenges**

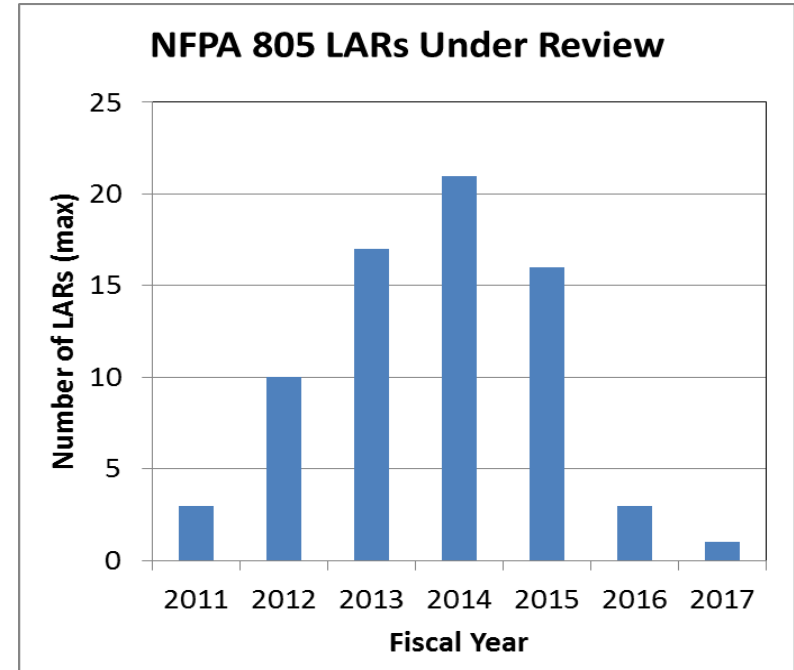


Presenters

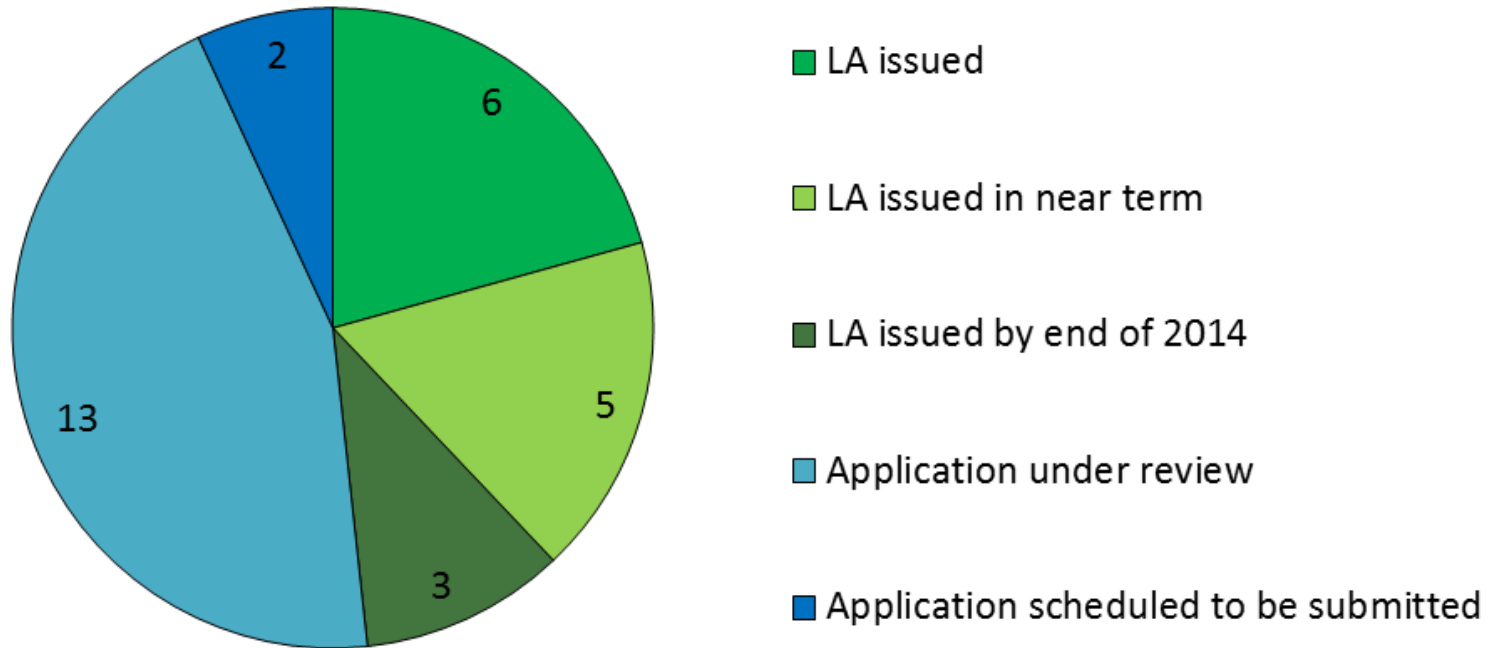
- **Joseph Giitter, Director, Division of Risk Assessment (DRA), NRR**
- **Alex Klein, Branch Chief, Fire Protection Branch, DRA, NRR**
- **Hossein Hamzehee, Branch Chief, Probabilistic Risk Assessment (PRA) Licensing Branch, DRA, NRR**

We are Focused on the Success of the NFPA 805 Program

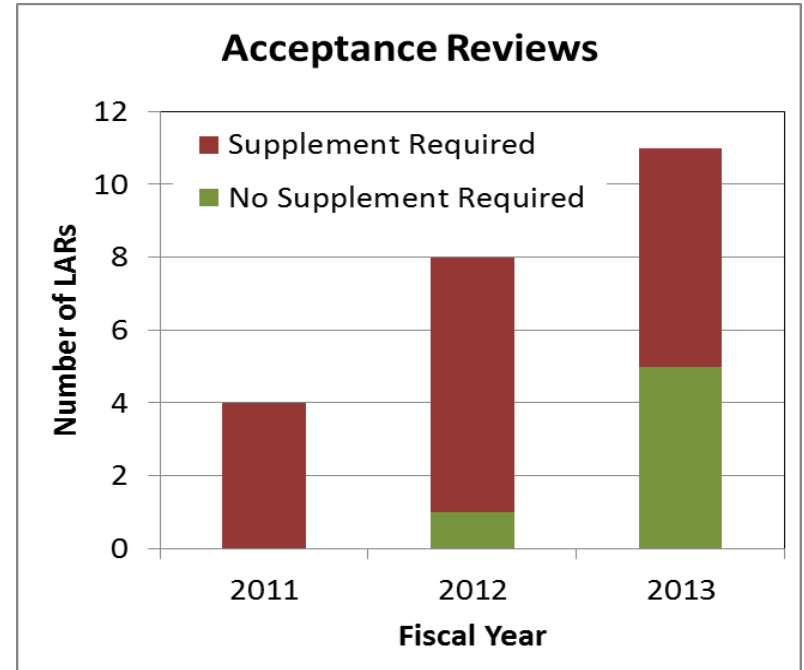
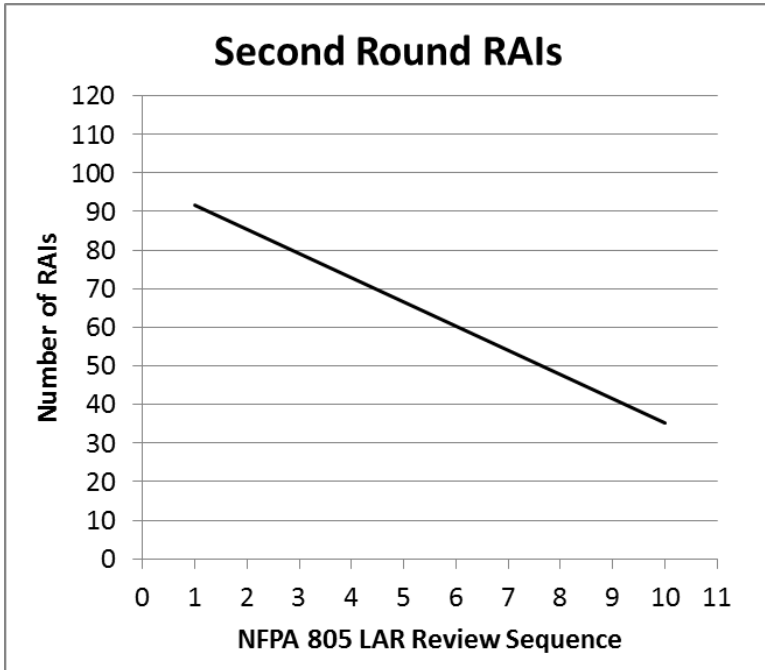
- **Safety Improvements**
- **Challenges**
 - **Resources**
 - **New Methods**
- **Efficiency**
- **Communications**



Nearly Half of the NFPA 805 Reviews Will Be Completed By the End of 2014



NFPA 805 LAR Quality Has Improved



Transition to NFPA 805 is a Positive Step Forward

- **Safety improvements**
- **Licensee knowledge**
- **Licensee ownership**

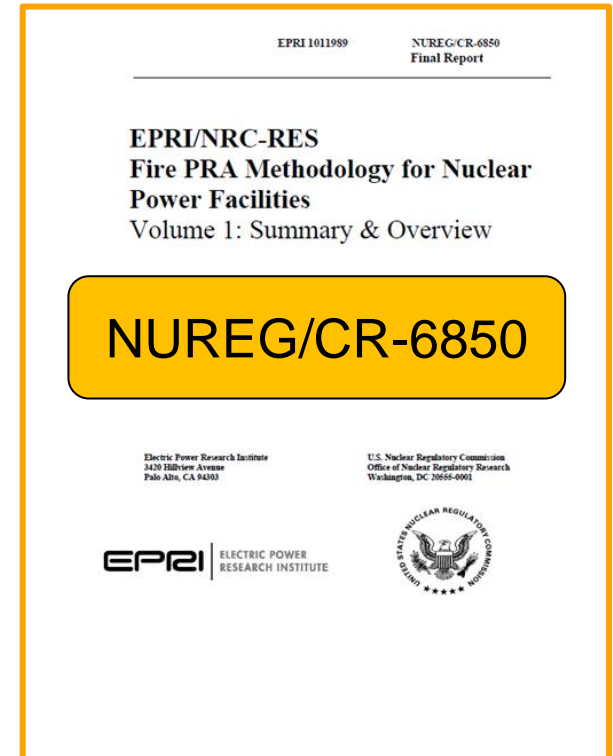


Enforcement Discretion Policy Supports NFPA 805 Transition

- **Policy**
 - **Issued in 2004**
 - **Provides enforcement discretion for certain fire protection non-compliances**
- **NFPA 805 Confirmatory Orders**
 - **Establishes a legally binding commitment to submit an NFPA 805 application**

Technical Challenges Related to Fire PRA

- **New methods are used in LARs and evaluated during review process**
- **Impact**
 - **Review Schedule**
 - **Consistency**
 - **Resource Challenges**
 - **Stability of Review Process**



Joint Fire PRA Method Development Efforts Have Been Successful

- **New methods and guidance have been developed by NRC and Industry**
 - **Fire testing by NRC/RES (e.g., Electrical Cabinet Heat Release Rate testing, Incipient Detection System Testing)**
 - **Joint Fire PRA research efforts by NRC/RES and EPRI**
- **FAQ process is used to provide interim guidance on various Fire PRA technical issues**

Significant Progress Made to Date

- **Fire PRA technical issues are being resolved**
- **A number of fire tests have been completed by NRC/RES**
- **“Freeze Point” concept for Fire PRA application is feasible**
- **A number of licensees have committed to installing RCP shutdown seals to enhance safety**

NRC Formed Risk-Informed Steering Committee

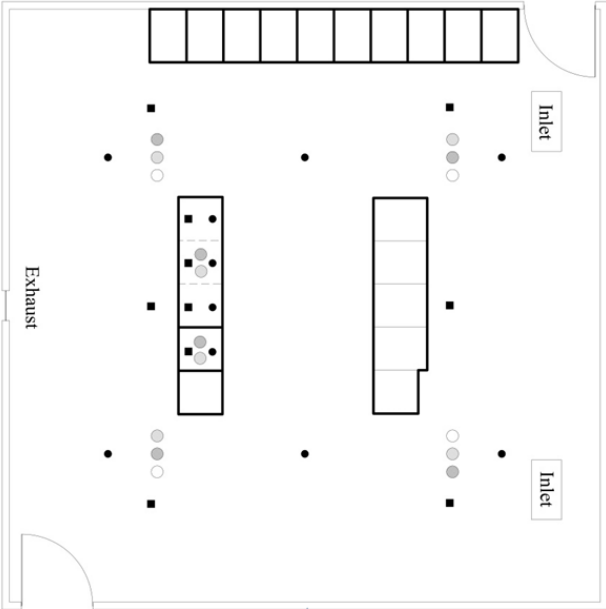
- **The Risk-Informed Steering Committee (RISC) was just formed in early 2014**
- **RISC is chaired by the NRR Office Director and other members include Deputy Directors from various NRC offices**
- **RISC provides strategic direction to the staff to advance the use of risk-informed decision making**

Incipient Fire Detection Systems

- **Installation of Incipient Fire Detection Systems (IFDS) can result in safety enhancement.**
- **Credit for IFDS is currently allowed in Fire PRA consistent with existing guidelines and operating experience.**
- **Results of IFDS testing will be used to provide more realistic credit in Fire PRA.**



Incipient Fire Detection System



- Ionization detector
- Photoelectric detector
- Laser detector
- ASD #1 sampling points
- ASD #2 sampling points

Point of View



Summary

- **Focus on safety**
- **Continuous process improvement**
- **Continued focus on communications**
- **Paving the path for future risk-informed applications**



Acronyms

ASD	Aspirating Smoke Detector
DRA	Division of Risk Assessment
EPRI	Electric Power Research Institute
FAQ	Frequently Asked Questions
IFDS	Incipient Fire Detection System
LA	License Amendment
LAR	License Amendment Request
NFPA	National Fire Protection Association
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
OEDO	Office of the Executive Director for Operations
PRA	Probabilistic Risk Assessment
RAI	Request for Additional Information
RCP	Reactor Coolant Pump
RES	Office of Nuclear Regulatory Research
RISC	Risk-Informed Steering Committee