



OVERVIEW OF THE OPERATING REACTORS BUSINESS LINE

June 17, 2014

Mark Satorius

Executive Director for Operations

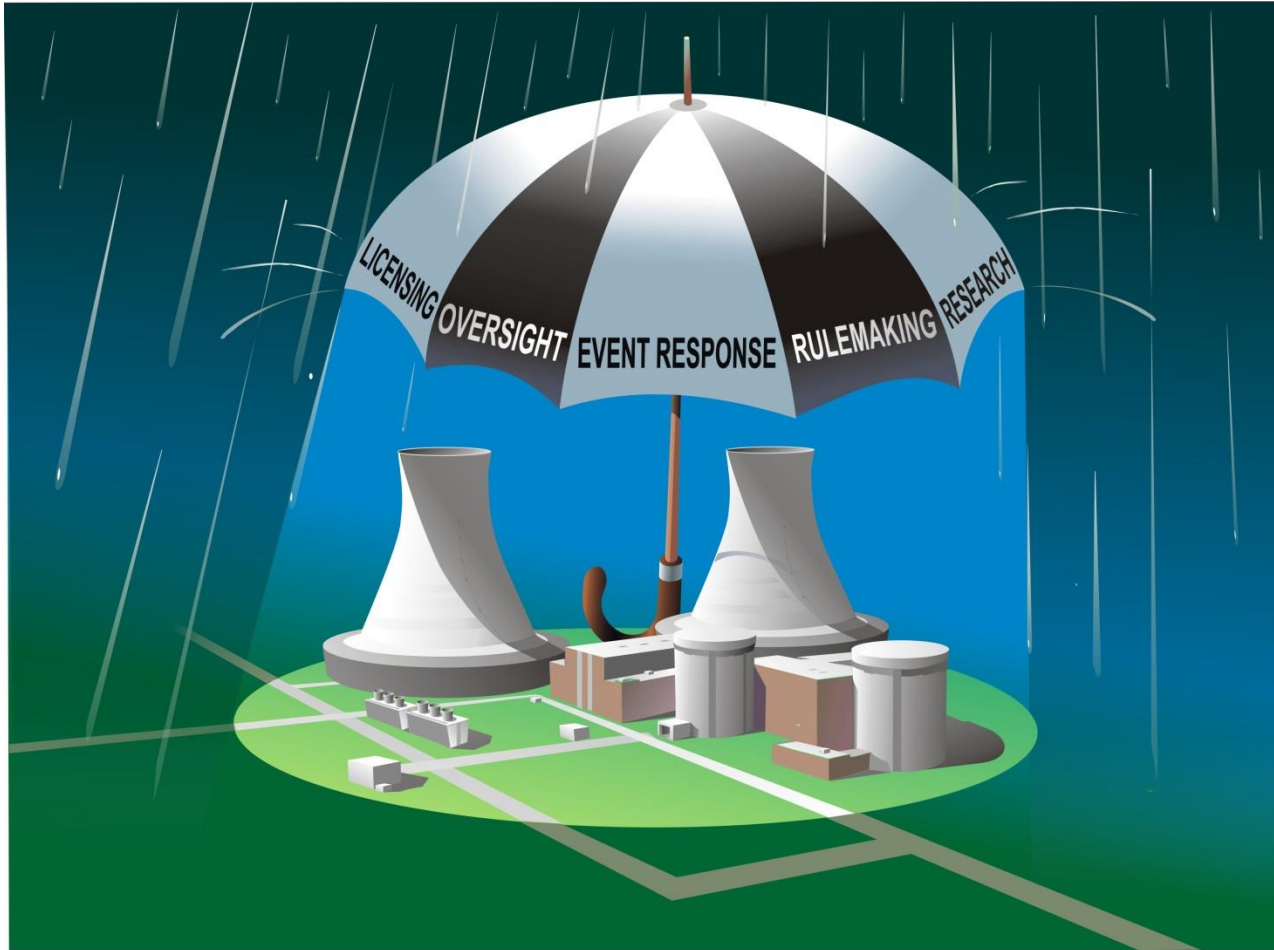
Safety and Security Oversight

Eric Leeds

Director

**Office of Nuclear Reactor
Regulation**

Safety and Security Oversight



Our Product Lines

- **Rulemaking**
- **Licensing**
- **Research**
- **Oversight**
- **Event Response**

Rulemaking, Petitions for Rulemaking, and Policy Issues

**Tara Inverso, Branch Chief
Division of Policy and Rulemaking
Office of Nuclear Reactor
Regulation**

Rulemaking

- **Rulemaking is a fundamental, important task at the NRC**
- **Staff is currently working on 13 high priority rules**
 - **All have a direct nexus to safety and security**
 - **One is necessary for the adequate protection of public health and safety**

Rulemaking (cont'd)

- **Three significant rulemakings in response to the events at Fukushima:**
 - **Station Blackout Mitigation Strategies**
 - **Onsite Emergency Response Capabilities**
 - **Filtering Strategies**

Petitions for Rulemaking

- **Staff is currently evaluating 22 open petitions for rulemaking**
- **Staff values the input of the public in its rulemaking processes**

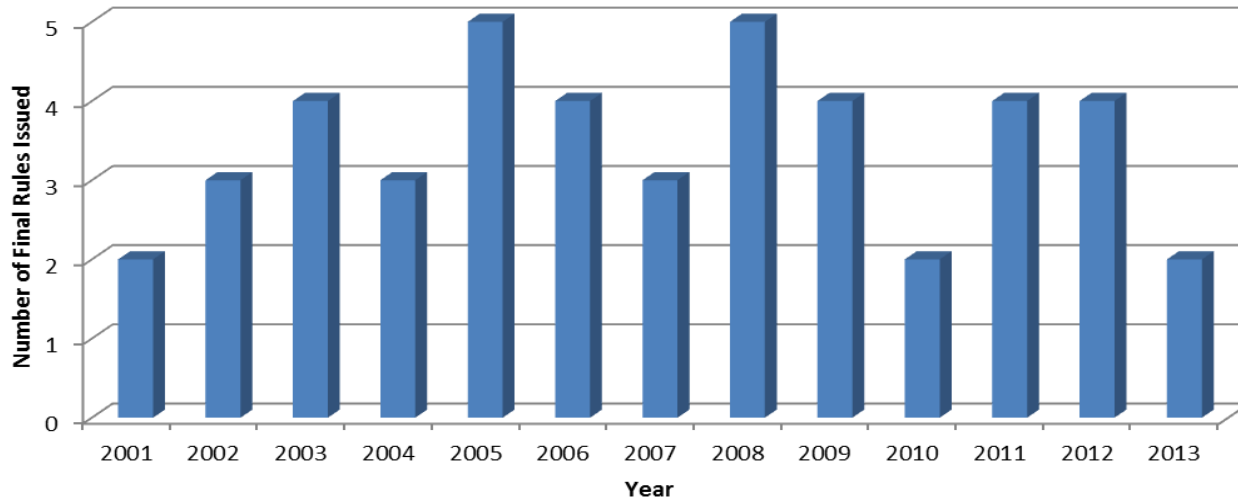
Ongoing Policy Work

- **NRC staff continues to address the Cumulative Effects of Regulation (CER) and to explore the Risk Prioritization Initiative (RPI)**

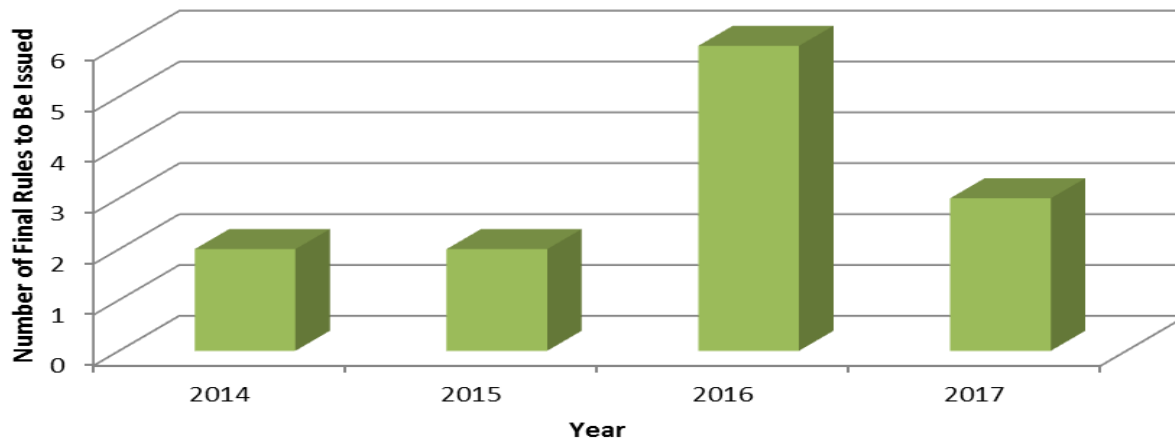
Ongoing Policy Work (cont'd)

- **SECY-14-0002, “Plans for Updating the NRC’s Cost-Benefit Guidance,” dated January 2, 2014**
 - **Describes several planned updates/improvements for NRC’s cost-benefit process**

Final Rules Issued Since 2001 (Operating Reactors Only)



Final Rules Scheduled to be Provided to the Commission (Operating Reactors , High Priority Only)



Focus Areas

- **Several technically complex, resource intensive rules are currently under development**
 - **Large scope**
 - **Numerous implementation steps**
 - **Topics spanning multiple offices**

Focus Areas

- **A retrospective review of some of NRC's regulatory analyses cost estimates were found to be less than actual implementation costs**

Focus Areas

- **Continue to explore CER and RPI to enhance the focus on safety and regulatory efficiency**

Licensing Program

Meena Khanna, Branch Chief
Division of Operating Reactor
Licensing
Office of Nuclear Reactor
Regulation

What is the Licensing Program?

- **Licensing actions and other licensing tasks**
- **Licensing actions vary from routine to complex actions**

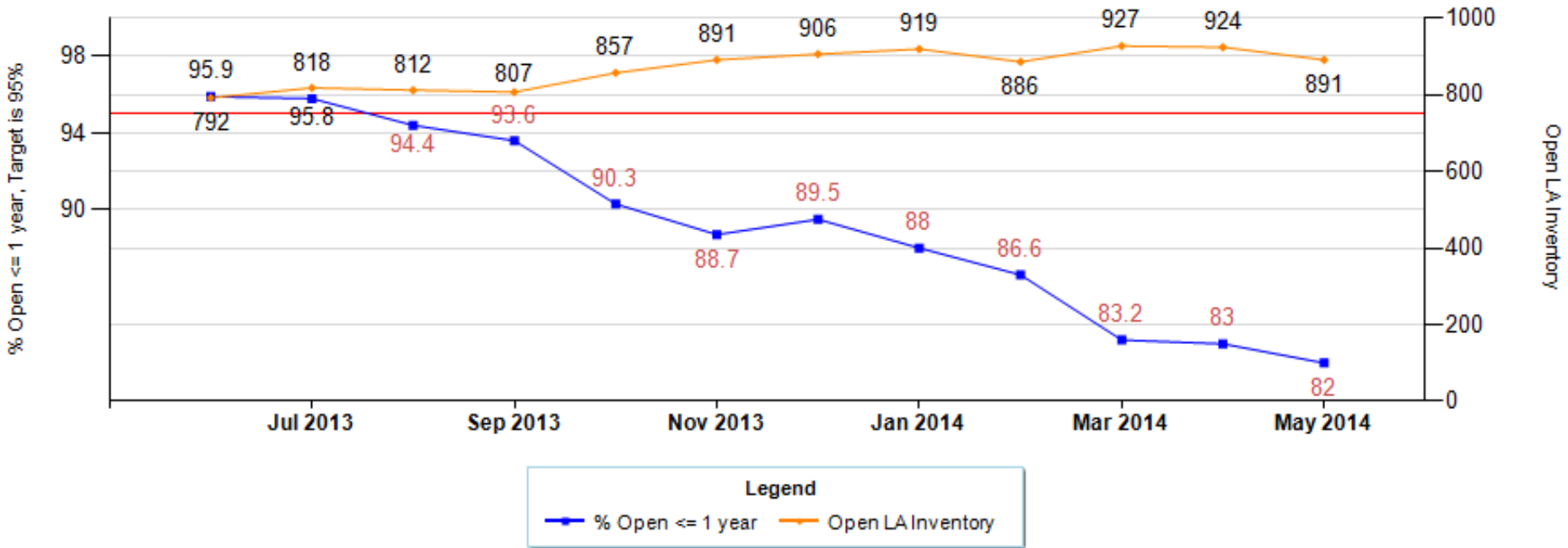
Licensing Program Inventory

- **Approximately 1500 licensing actions and other licensing tasks**
- **38% Fukushima-related**
- **Met timeliness metrics for past 5 years**

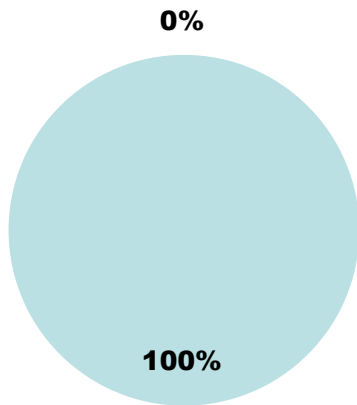
Fukushima Workload Impacts

- **Competing resources and skill sets**
- **Development of safety-focused prioritization scheme**
- **Backlog of licensing activities**
- **Significant impact to agency performance metrics**

Licensing Actions/Timeliness & Inventory Trends

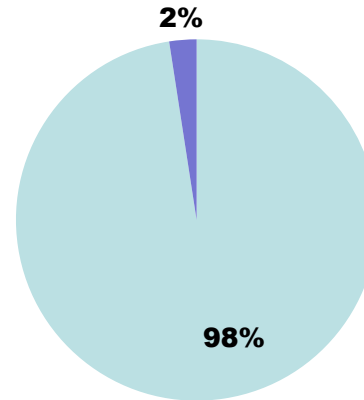


Fukushima vs. Non-Fukushima Work



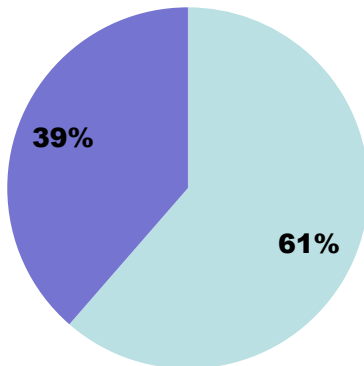
FY 2011

- Normal LAs & OLTs
- Fukushima LAs & OLTs



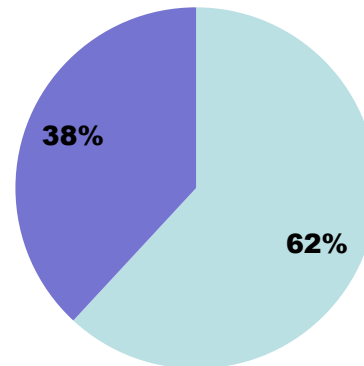
FY 2012

- Normal LAs & OLTs
- Fukushima LAs & OLTs



FY 2013

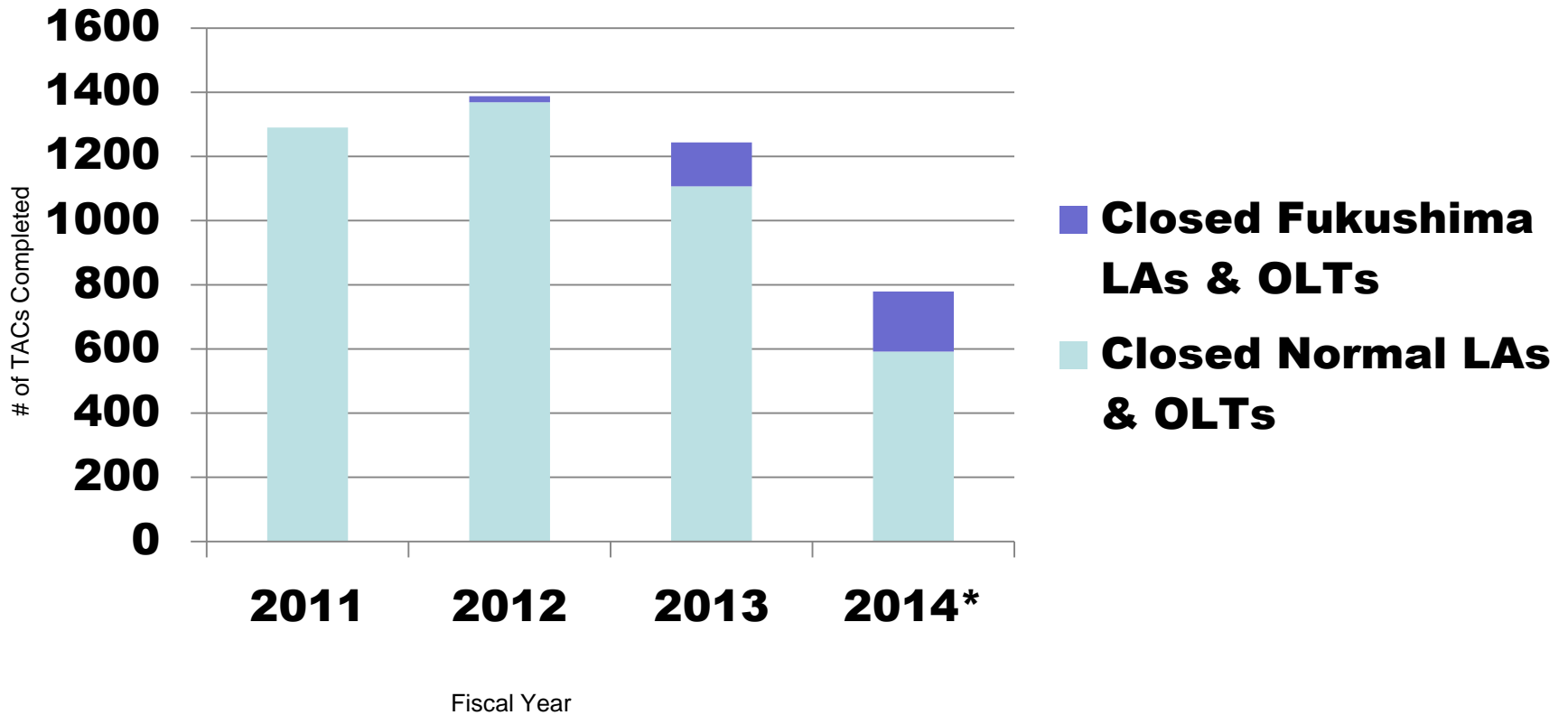
- Normal LAs & OLTs
- Fukushima LAs & OLTs



FY 2014

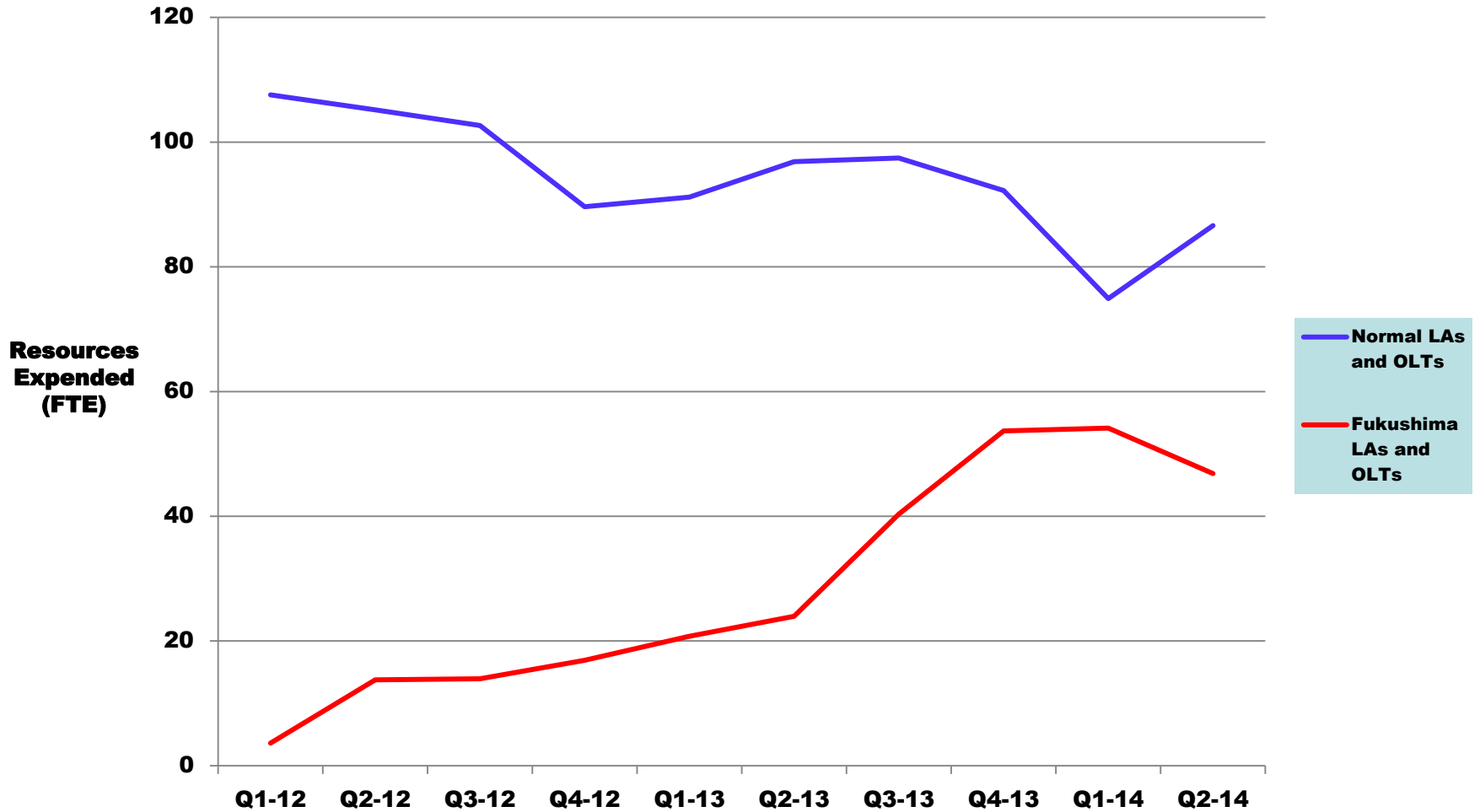
- Normal LAs & OLTs
- Fukushima LAs & OLTs

Licensing Actions (LAs) and Other Licensing Tasks (OLTs) Completed by Fiscal Year



* FY14 as of May 2014

Resource Utilization



Long-Standing Technical Issues

- **NFPA 805**
- **GSI-191**
- **Degraded Voltage Relays**
- **Tornado Missile Protection**

Focus Areas

- **Continued focus on safety and security**
- **Continued focus on agency's priorities**
- **Management of resources and critical skills**
- **Continued focus on resolution of long-standing technical issues**
- **Stakeholder communications**

Research Support to Business Line Partners

Robert Tregoning

**Senior Level Advisor for Materials
Office of Nuclear Regulatory
Research**

Outline

- **Key messages**
- **Research support**
 - **Regulatory framework**
 - **Licensing**
 - **Reactor Oversight Process (ROP)**
 - **Event response**
- **Focus areas**

Key Messages

- **Develop technical bases for regulatory decision-making**
- **Structure activities mainly based on program offices' requests**
- **Collaborate with domestic and international partners**
- **Develop tools and perform confirmatory research**

Regulatory Framework Support

- **Develop technical bases**
 - **Rulemaking**
 - **Generic communications**
- **Lead regulatory guide process**
- **Lead agency involvement in consensus codes and standards development activities**

Licensing Support

- **Provide technical expertise and help assess regulatory implications of research**
 - **Safety evaluations, exemption requests, plant inspections**
- **Examples**
 - **Fire risk, extended power uprate, nondestructive evaluations**

ROP Support

- **Maintain tools and methods for the significance determination process**
 - **Standardized plant analysis risk models**
- **Evaluate operational events**
 - **Accident sequence precursor program**

Support for Event Response

- **Support operations center and its infrastructure**
 - **Participate on the reactor safety and protective measures teams**
 - **Provide analysis tools and expertise**
- **Conduct consequence analyses**

Focus Areas

- **Improve understanding of integrated challenges to plant safety and security**
- **Maintain an adequate research infrastructure**
- **Develop expertise in emergent research areas**

Reactor Oversight Process

Julio Lara, Team Leader

**Technical Support Staff, Division of
Reactor Projects**

Region III

Safety Focus

- **Ensure safe and secure operation of the nation's fleet of nuclear power plants by implementing the Reactor Oversight Process**
- **SAFETY and SECURITY are the daily focus for our inspectors**
- **Monitor plant Operations and respond to events**
- **Use plant Operating Experience to inform inspection staff**

Robust Inspection Program

- **Reactor Oversight Process informed by risk concepts, and implemented by independent inspection staff**
- **Inspection program adjusts to safety and regulatory changes**
- **Oversight Process is a mature, living program**

ROP Enhancement Activities

- **Baseline Inspection Program Review**
 - **Report completed**
 - **Recommendations provide increased inspection flexibility**
- **Assessment Program Enhancements**
 - **Project Plan in place**
 - **Gathering stakeholder input**
- **Incorporates ROP Independent Review Recommendations**

Assuring Operating Reactor Safety

- **Ensure special focus plants resolve safety, technical and programmatic issues**
- **In 2013, on average, expended over 2100 hours of direct inspection at every site across Strategic Performance Areas**
- **Inspections at Browns Ferry, Ft. Calhoun, Monticello, and Davis Besse**
- **Examples of inspector observations and findings preventing potentially significant safety issues**

Focus Areas and Priorities

- **Increased inspection of equipment performance as more plants operate 40+ years**
- **Transition of Fukushima Tier 1 activities from licensing to oversight and incorporating aspects into baseline inspection program**
- **Implementation of cyber-security inspections**
- **Communications with external stakeholders**

Inspectors “Out in the Plant”



Event Response

**Kevin Williams, Branch Chief
Division of Preparedness and
Response**

**Office of Nuclear Security and
Incident Response**

Safety Message

The NRC has maintained the readiness of the Headquarters Operations Center, Regional Incident Response Centers, and response Teams. The NRC is capable of responding to a variety of events to ensure protection of the public.

Key Messages

- **The NRC's Incident Response Programs are vital to the success of the Agency.**
- **The Incident Response Organization continues to work collaboratively with the interagency**
- **The Incident Response Program continues to look for opportunities to enhance the program.**

Focus Area

- **Integration of the Radiological Emergency Preparedness Program and the all-hazards (Whole Community) approach to event response**
 - **Whole community approach**
 - **Next steps**
 - **Interactions with stakeholders**

Acronyms

- **CER – Cumulative Effects of Regulation**
- **GSI – Generic Safety Issue**
- **LA – Licensing Action**
- **NFPA – National Fire Protection Association**

Acronyms

- **OLT – Other Licensing Task**
- **ROP – Reactor Oversight Process**
- **RPI – Risk Prioritization Initiative**