



United States Nuclear Regulatory Commission  
*Protecting People and the Environment*

## An Overview of NRC Operations

Bill Borchardt  
Executive Director for Operations

Regulatory Information Conference  
March 13, 2012

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## 2011



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## Our Regulated Community

- Operating reactors: 104
- Materials licensees: ~22,000
- Uranium recovery licensees: 8
- Fuel cycle licensees: 13



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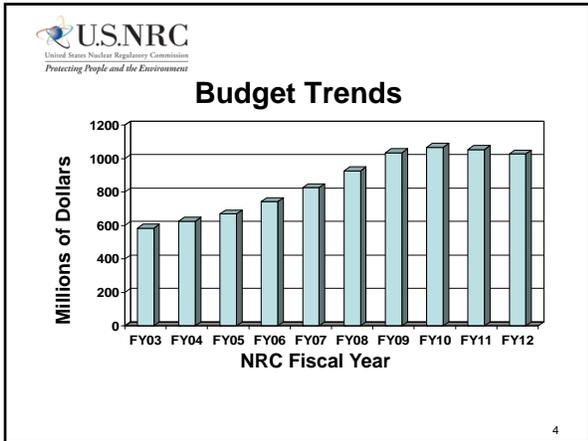
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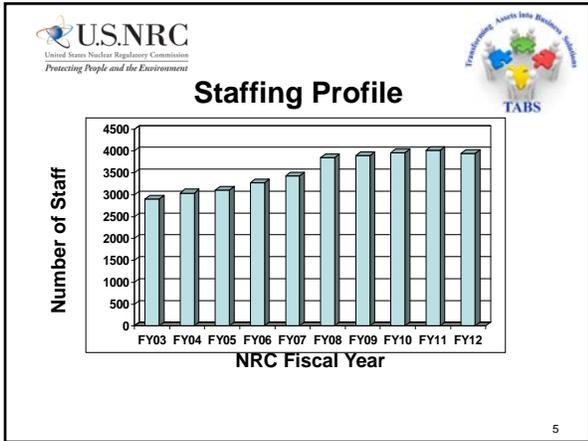
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### Infrastructure

- Three White Flint North
- Regional office relocations
- Information technology initiatives

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## Communications with Stakeholders

Join the dialog today!  
 Visit the NRC Blog at [www.nrc.gov](http://www.nrc.gov)

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## 2011 Accomplishments

- Core mission responsibilities
- New reactor milestones
- Safety culture policy statement
- SOARCA
- Completed various pilot/first time efforts

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## Fukushima Lessons Learned Review

- Seismic and flooding protection
- Prolonged loss of AC power
- Containment venting
- Spent fuel pool cooling
- Severe accident procedures
- Emergency preparedness
- Regulatory framework for low probability, high consequence events
- Greater attention to defense-in-depth for low probability events
- Seismically induced fires and floods
- Hydrogen control mitigation inside buildings
- EP topics for multiunit events and prolonged SBO
- EP topics on decision making, radiation monitoring, and public education

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## Prioritization and Impacts of Implementing Fukushima Lessons Learned

The agency will strive not to displace ongoing work that has greater safety benefit, work that is necessary for continued safe operation, or other existing high priority work.

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## Selected Current Topics with the Existing Fleet

- Assessment of debris accumulation on pressurized water reactor sump performance (GSI-191)
- Spent fuel pool criticality analyses
- Cumulative effects of regulation
- Vendor oversight

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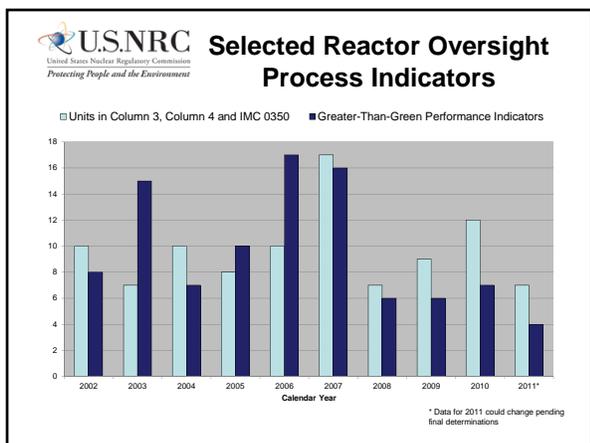
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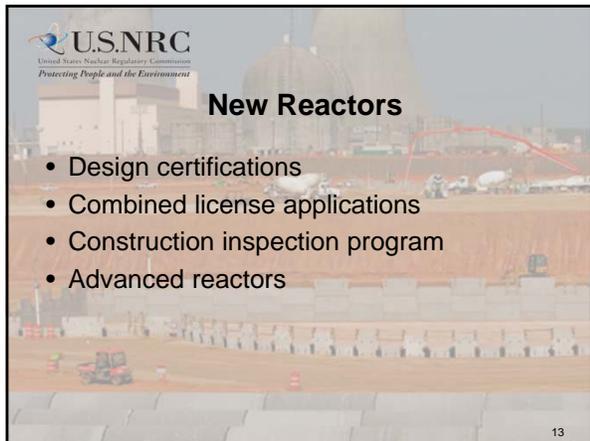
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### New Reactors

- Design certifications
- Combined license applications
- Construction inspection program
- Advanced reactors

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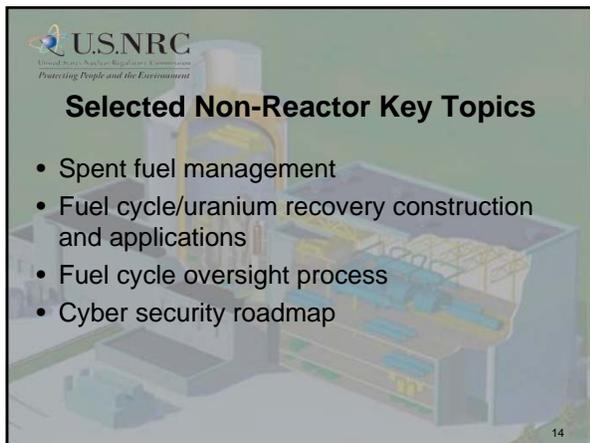
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### Selected Non-Reactor Key Topics

- Spent fuel management
- Fuel cycle/uranium recovery construction and applications
- Fuel cycle oversight process
- Cyber security roadmap

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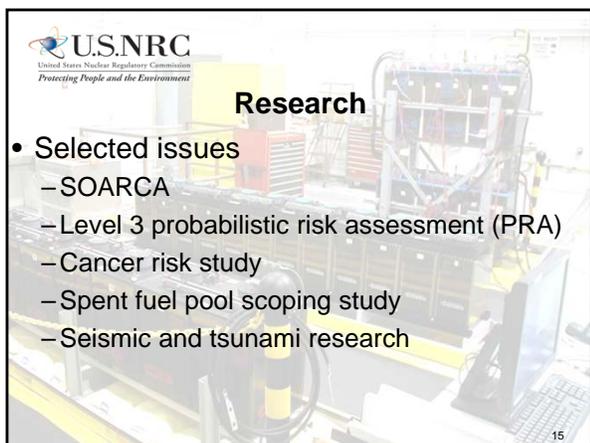
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### Research

- Selected issues
  - SOARCA
  - Level 3 probabilistic risk assessment (PRA)
  - Cancer risk study
  - Spent fuel pool scoping study
  - Seismic and tsunami research

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### **International Activities**

- IAEA/NEA
- Fukushima lessons learned
- Bilateral technical exchanges
- Support for new nuclear programs



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### **Summary**

- Core mission priorities
- Fukushima lessons learned
- Implementation focus for 2012

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