



Operating Reactors - Programs, Performance, and Future Plans

January 26, 2010

Agenda

- **Opening Remarks – Bill Borchardt, Executive Director for Operations**
- **Program Accomplishments and Challenges – Eric Leeds, Director, Office of Nuclear Reactor Regulation (NRR)**
- **Programmatic Topics – Bruce Boger, Deputy Director for Reactor Safety Programs (NRR)**
- **Implementing Operator Licensing – Roy Caniano, Director, Division of Reactor Safety, Region IV**
- **Technical Topics – Jack Grobe, Deputy Director for Engineering and Corporate Support (NRR)**
- **Concluding Remarks – Bill Borchardt, Executive Director for Operations**

Licensing

- **Significant Accomplishments**
 - **Completion of over 1500 licensing activities**
 - **Significant progress on Watts Bar 2 licensing review**
- **Challenges**
 - **Credit for containment pressure**
 - **Spent fuel management**

Reactor Oversight

- **Significant Accomplishments**
 - **Implemented inspection program assuring operational safety**
 - **Feedback of Operating Experience (OpE) to licensees**
 - **OpE integration into regional inspection activities and licensing programs**
- **Challenge**
 - **Maintaining vigilance in evaluating OpE**

Rulemaking

- **Significant Accomplishments**
 - **Power reactor security requirements**
 - **Emergency preparedness enhancements**
- **Challenges**
 - **Aggregate impact of rulemaking activities**
 - **Maintain petition for rulemaking timeliness**

Incident Response

- **Significant Accomplishments**
 - Responses to actual events
 - Support 4 exercises/year
 - Teamwork of qualified responders
- **Challenge**
 - Sustaining readiness for response

Work Hours/Fatigue Rule

- **Addresses short-term and cumulative fatigue**
- **Licensees are successfully implementing new requirements**
- **Addressing emergent issues**

Work Hours/Fatigue Rule

- **NRC review panel to ensure consistency**
- **Pursue rulemaking activities**
 - **Addition of quality control/quality verification inspectors**
 - **Disposition of petition for rulemaking**

License Renewal Status

- **59 licenses renewed and 12 applications under review**
- **Technical issues being identified**
- **First set of plants entering the renewed period**

License Renewal Status

- **Continuing to provide support for contested proceedings**
- **Updating license renewal guidance documents**
- **Evaluating feasibility for operations beyond 60 years**

Medical Isotope Production

- **U.S. depends on foreign sources for Molybdenum-99 (Mo-99)**
- **Interest in domestic production facilities**
- **NRC working group has been established**

Medical Isotope Production

- **Coordinating with other U.S. government agencies**
- **Preparing for future licensing reviews**

Operator Licensing

- **Ensures qualified operators**
- **480 applicants examined in 2009**
- **Many examiners cross certify as inspectors**
- **Examiners support emergency response**

Operator Licensing

- **Regional and NRR staff work with stakeholders to resolve issues**
- **Updating standards associated with simulators and medical certifications**
- **Continuing program assessments**

Underground Cables

- **Evaluating operating experience and inspection findings**
- **Issued generic letter regarding cable failures and monitoring**
- **Piloting Regulatory Issue Resolution Protocol**

Underground Cables

- **Continue routine baseline inspections**
- **Issue regulatory guidance**
- **Monitor industry performance and operating experience**

Digital Instrumentation and Control

- **Completed Oconee and Wolf Creek digital upgrade amendments**
- **Issued technical interim guidance**
- **Licensing process interim guidance nearing completion**
- **Early stages on Watts Bar 2 and Diablo Canyon**

Vendor Inspection Program

- **Program scope**
- **Ensure quality components**
- **Coordination with Office of New Reactors**

Credit for Containment Pressure

- **30 operating units credit containment pressure**
- **Staff determined sufficient safety margin**
- **Evaluating issues raised by Advisory Committee for Reactor Safeguards (ACRS)**
- **Licensing reviews pending resolution of issues**

Credit for Containment Pressure

- **Collecting information on pump behavior**
- **ACRS Meeting March 2010**
- **Updating regulatory guidance**
- **Commission Paper April 2010**

Gas Accumulation

- **OpE disclosed safety concern – licensees have taken action**
- **Issued generic letter**
- **Response reviews ongoing**
- **Developing new generic technical specifications**
- **Support inspection activities**

Buried Piping

- **Evaluated operating experience and inspection findings**
- **Reviewed regulations and codes and standards**
- **Received industry piping integrity initiative**
- **Developing new standards**

Concluding Statements

- **Safety and security of operating fleet is our priority**
- **Agency-wide collaboration and strong coordination**