



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