

# **OVERVIEW**

**Mario V. Bonaca**  
**ACRS Chairman**

# **LICENSE RENEWAL**

- **Reviewed three applications since April 2003**
- **Will review another three applications between October and December 2003**
- **Responded to SRM on improvements to generic license renewal guidance documents – June 2003**

# **LICENSE RENEWAL (Cont'd)**

- **Will review five applications in CY 2004**
- **Exploring means to further streamline the ACRS review of license renewal applications**

# **RISK-INFORMING 10 CFR 50.46**

- **ACRS was briefed on the Use of Expert Elicitation Process to Develop LOCA Frequencies**
- **Will review results of elicitation in Fall 2003**

# **RISK-INFORMING 10 CFR 50.46 (Cont'd)**

- **Will review proposed rulemaking in response to March 31, 2003 SRM prior to it being forwarded to the Commission**
- **Will work with the Staff to reconcile challenging technical issues**

# **PROPOSED 10 CFR 50.69**

- **Provided comments and recommendations on the proposed 10 CFR 50.69, March 19, 2002**
- **Discussed with Commission on July 10, 2002**

# **PROPOSED 10 CFR 50.69 (Cont'd)**

- **Meeting planned in Fall 2003 to discuss:**
  - **Draft Final 10 CFR 50.69**
  - **Staff's resolution of public comments**
  - **Staff's resolution of ACRS comments and recommendations**
  - **NEI's implementation guidance and staff's endorsement**

# **AP1000 DESIGN CERTIFICATION REVIEW**

- **Held four Subcommittee meetings and one Full Committee meeting to discuss AP1000 design aspects, PRA, Thermal-Hydraulic issues, and DSER open items**

# **AP1000 (Cont'd)**

- **Reliability of ADS-4 Squib Valve still a question**
- **Significant number of open items remain to be resolved**
- **ACRS Full Committee meeting 10/2003 to discuss status of resolution of open items**
- **ACRS Full Committee Review of FSER—7/2004**

# **GE/ESBWR PRE-APPLICATION REVIEW**

- **ESBWR Design is based on GE/SBWR and ABWR Designs with Passive Decay Heat Removal system**
- **Elimination of recirculation pumps, jet pumps, and associated valves and piping reduces the number of locations where reactor coolant system leakage could potentially occur**

# **GE/ESBWR (Cont'd)**

- **Held one Subcommittee meeting and one full Committee meeting to review thermal-hydraulic issues and design aspects**
- **Will continue to review ESBWR design aspects and associated Staff review efforts**

# **POWER UPRATE REVIEW STANDARD**

- **Reviewed draft final extended power uprate review standard – ACRS Report dated September 24, 2003**
- **Expect to review up to seven power uprate applications in CY 2004**
- **Revise ACRS review criteria for Power Uprate Applications (>5%) after Staff's implementation of review standard**

# **FUTURE ACRS ACTIVITIES**

- **Risk-Informed and Performance-Based Regulation**
- **Advanced Reactor Designs**
  - **Design Certification Of AP1000**
  - **Pre-application Reviews**
  - **Early Site Permit Process/Applications**
- **Thermal-Hydraulic Codes**

# **FUTURE ACRS ACTIVITIES (Cont'd)**

- **Materials Degradation Program**
- **Steam Generator Action Plan**
- **Mixed Oxide Fuel Fabrication Facility**
- **License Renewal and Core Power Uprate Applications**

# **FUTURE ACRS ACTIVITIES (Cont'd)**

- **High-Burnup Fuel Issues**
- **Safeguards and Security Matters**
- **Resolution of Generic Safety Issues**
- **Significant Reactor Operating Events**
- **Safety Research Program**
- **Fire Protection Matters**

# ACRONYMS

- **ABWR – Advanced Boiling Water Reactor**
- **ADS-4 – Automatic Depressurization System**
- **DSER – Draft Safety Evaluation Report**
- **ESBWR – Economically Simplified Boiling Water Reactor**
- **FSER – Final Safety Evaluation Report**
- **GE – General Electric**

# **ACRONYMS (cont'd)**

- **LOCA – Loss of Coolant Accident**
- **NEI – Nuclear Energy Institute**
- **PRA – Probabilistic Risk Assessment**
- **SBWR – Simplified Boiling Water Reactor**
- **SRM – Staff Requirements Memorandum**