

**Risk Management/PRA
Standards
Joint Committee on
Nuclear Risk Management
(JCNRM)**

*Regulatory Information Conference 2011
Co-Chair C. Rick Grantom (STPNOC)*

JCNRM CHARTER

- To develop, revise and maintain standards and guides on probabilistic risk assessment (PRA) and related risk management techniques supporting risk-informed and performance-based applications for nuclear facilities.

JCNRM SCOPE

- The development of standards and guidance that establish risk criteria and methods for PRA, risk assessment, and risk management for nuclear facilities.
- Review of standards as requested by other American Nuclear Society (ANS) and American Society of Mechanical Engineers (ASME) standards committees, and other standards development organizations on related topics to identify inconsistency, lack of integration of risk concepts and duplication, as appropriate.

Current JCNRM Products

- **Published**
 - ASME/ANS RA-Sa-2009, Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications (At-Power)
 - General Requirements (Part 1)
 - Internal Events (Part 2)
 - Internal Floods (Part 3)
 - Internal Fires (Part 4)
 - Seismic Events (Part 5)
 - Hazard Screening (Part 6)
 - High Winds (Part 7)
 - External Floods (Part 8)
 - Other external hazards (Part 9)
 - Seismic margin analysis (Part 10)

Upcoming JCNRM Products

- **In process**
 - Level 2 PRA (Radiological Release Frequency)
 - Level 3 PRA (Health Effects)
 - Low power and shutdown PRA (LPSD for Operating Plants)
 - Advanced LWR PRA (Part 52, Pre-Fuel Loading)
 - Non-LWR PRA (Pre and Post Fuel Loading)
 - Addendum B/Edition of ASME/ANS RA-Sa-2009

Use of Standards

- **Requirements intended to define “What to do” not “How to do”**
- **Not meeting a requirement does not mean you can’t do a risk informed application**
 - Scope and level of detail in the PRA is dependent upon the complexity of the application
- **“Good industry practice” - have a gap analysis to explain owner specific levels of meeting the standard**
- **Factor into strategic plans for pursuing risk informed applications (5B, 4B, 50.69, NFP 805, others)**

Issues to be considered

- Principles of Risk Management as applied to nuclear facilities
- Standard/Guidance for Independent Decision Making Panels
- Improve Peer Review process, guidance, and governance
- Methods for Developing Risk Informed Performance Indicators & Decision Criteria (guidance)
- Standard/Guidance for Risk Informed Operational Decision Making
- Improving usefulness of standards
- Improving the use of risk methods and insights across regulatory/industry organizations and consensus committees

Issues Before the JCNRM

- Strategic Plan Revision & Harmonization
 - ASME Board on Nuclear Codes & Standards (Task Group on Risk Management)
 - ASME/ANS/IEEE/Industry Nuclear Risk Management Coordinating Committee
 - Industry/NRC Strategic Plans
- Communicating & Planning with Key Stakeholder Organizations (NRC, NEI, Owner's Groups, EPRI)
- International participation

SUMMARY

- Standards are intended to facilitate and support risk informed applications
- Processing of risk informed applications should be facilitated and streamlined by the use of standards
- Feedback from Stakeholder Organizations and Users is essential
- Participate in the review and comment of standards products

Information

- 38 members coming from nuclear owner / operating companies, vendors, regulators, consultants, and academia, including international participants
- 2 Main Committee meetings a year plus frequent telecons with subordinate groups
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