



**RIC 2010**  
**SPAR Model Peer**  
**Reviews**

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## Why a Peer Review?

- OIG-06-A-24, "Evaluation of the NRC's Use of Probabilistic Risk Assessment in Regulating the Commercial Nuclear Power Industry," dated September 29, 2006
  - Models should reflect as built/as operated plant
- SPAR Model, Quality Assurance Plan, Revision 0, U.S. Nuclear Regulatory Commission, Washington, DC, September 15, 2006
- Comply with OMB Bulletin, "Final Information Quality Bulletin for Peer Review", Office of Management and Budget, Executive Office of the President, December 16, 2004 and Federal Register, Vol. 70, January 14, 2005, p 2664 (70 FR 2664).
- Provide for an independent review of the model
- Although confirmatory, the SPAR models still need to exhibit a minimum level of "quality"
  - ensure the SPAR models are of sufficient quality for performing SDP Phase 3, ASP and MD 8.3 event assessments of operational events



# Why Use the ASME Standard and Reg. Guide 1.200?

- WHY NOT
  - Generally accepted by both NRC and industry
  - Documented review criteria, and widely used by industry

Since SPAR models are standardized, peer review of one typical PWR and one typical BWR believed sufficient



# Why Industry Participation Was Important?

- Transparency leads to credibility
- Consistency with industry peer reviews
  - Team Leads were very experienced industry volunteers
- Industry Experience
- Provided for a unique spirit of cooperation and technical interactions
  - Support of the Owners Groups
  - Supplementary benefits

Result was an Independent peer review  
consistent with industry peer reviews



# Peer Review Teams

- BWR Model:
  - Ed Burns, Team Leader, Erin Engineering
  - Ching Guey, Florida Power & Light
  - Chris Hunter, Reliability & Risk Eng. NRC/RES
  - Dave Passehl, SRA, NRC Region 3
  - Wayne Schmidt, SRA, NRC Region 1
  - Marty Stutzke, SLS, NRC/RES
  
- PWR Model:
  - Barry Sloane, Team Lead, Erin Engineering
  - Robert Cavedo, Constellation Engineering
  - Allen Moldenhauer, Dominion Generation
  - Christopher Cahill, SRA, NRC Region 1
  - Laura Kozak, SRA, NRC Region 3
  - George Replogle, SRA in training Region 4
  - Jeffery Wood, Reliability & Risk Eng. NRC/RES