



RIC 2010
SPAR Model Peer
Reviews

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SPAR Model Background

- SPAR models were developed to support specific NRC applications. These applications shaped SPAR model methods and logic development.
- The SPAR models generate ‘risk informed’ insights independent of the PRAs. These insights are ‘confirmatory’ in nature.
- The expectation of NRC/INL is that the SPAR models meet capability Category I of the ASME standard.



Major Finding of Peer Review

- Model Results
 - Comparable to PSA and adequate for NRC applications
- Documentation
 - Generally not up to ASME standard
 - Need cooperation of licensees (e.g., system notebooks) but recognize the need to minimize burden



Major Finding of Peer Review (cont.)

- Generic vs. Plant Specific
 - Failure Data
 - HEPs (and level of dependency analysis)
- Model Currency
 - No formal mechanism for feedback of plant modifications/upgrades
- Success criteria
 - Mixture of various sources (NUREGs, PSAs)