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# RIC 2007

# Unresolved Technical Issues that Account for Differences Between NRC SPAR Model and Licensee PRA Results

Pete Appignani
Office of Nuclear Regulatory Research
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# Technical Issues That Influence Risk Results

1. Standard methodology and implementation of initiating event fault trees for cooling water support systems (i.e., ESW & CCW) and instrument air systems
2. Standard approach for recovery from station blackout after battery depletion (LOOP/SBO)
   - Convolution for LOOP
   - Conditional LOOP logic in SPAR models
3. Standard approach for injection following containment failure (BWR)

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# Technical Issues (cont.)

4. HRA dependencies and recovery modeling issues

5. Initiating event frequencies

6. Success criteria inconsistencies
   - TH analysis
     - Extensive thermal-hydraulic analysis to determine ”bounding” success criteria and timing for SPAR models
   - Other

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# Technical Issues (cont.)

7. Common Cause Failure modeling/methods
8. Containment sump and pool plugging, GSI-191
9. Standard requirements for containment sump recirculation during small loss-of-coolant and very small loss-of-coolant events

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# Approach to Address Outstanding Technical Issues

- NRC desires to work with industry to resolve outstanding technical issues

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# Approach to Address Outstanding Technical Issues (cont.)

- Develop detailed guidance for models and parameter estimates for the technical issue that can result in significant variations in results
- Implement “detailed guidance” consistent with High Level Requirements and Supporting Requirements of ASME RA-Sb-2005, Addenda To ASME RA-S-2002

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# Approach to Address Outstanding Technical Issues (cont.)

- Less significant issues can be addressed through ASME standard alone and case by case
- Manage exceptions, emerging issues as they occur considering significance
- Recognize role of SPAR to provide confirmation of overall CDF and dominant contributors