

# Use of Licensee PRA Models in SDP Assessments

## RASP Handbook Public Meeting

May 19, 2014

# Overview of Proposal

- Advantages of using licensee PRA in SDP
  - Quality Standard; RG 1.200 peer-reviewed
  - Regularly updated to reflect as-built, as-operated plant
  - Consistent with MSPI, online a4, risk-informed initiatives
  - Provides more realistic focus on risk significant SSCs
- Value of SPAR model capability
  - Support of ASP, event response, independent challenge
  - Allows an independent verification of results
  - Not updated as regularly as licensee models
- Proposal
  - Use licensee models to evaluate significance
  - Focus resources and effort on safety significant findings
  - Confirm plant model results using SPAR for potential White
  - Gives opportunity for regular benchmarking of SPAR models

# Examples of SPAR Model Input Differences

ISSUE	NRC SPAR MODEL	Plant Model	Comments
River Water System Train Maintenance Unavailability	19.4 Days/Yr/Train (5E-2)	<3 Days/Yr/Train (6E-3)	<ul style="list-style-type: none"> <li>Plant specific data shows this value to be &lt; 3 days per train per year.</li> <li>Data in the model is consistent with industry practice.</li> <li>Maintenance Rule 'Red' threshold is 7.3 days</li> </ul>
Loss of Feedwater (LOF) scenario	No Credit for CRDs for LOF event	Failure of CRD Equipment + op action in model	<ul style="list-style-type: none"> <li>CRD to maintain Rx level <u>NOT</u> credited in NRC SPAR.</li> <li>Post LOF, one CRD pump continues to run; procedures provide direction for starting 2<sup>nd</sup> pump.</li> <li><u>TWO CRD PUMPS CAN MAINTAIN RX LEVEL.</u></li> </ul>

# Examples of SPAR Model Output Differences

Comparison of Threshold from Green to White for SDP			
Comp ID	SPAR Results	Plant Model Results	Comments
AFW Pump	4 days	21 days	SPAR has large importance on transient events
Diesel Generator	37 days	62 days	Possible delta due to DG recovery
HPSI	6 days	2 days	Need to evaluate

Differences can only be understood with a detailed evaluation