

GOALS: 1) Ensure MSPI applicability boundary is clearly defined and implemented. 2) Ensure MSPI is correctly calculated. 3) Evaluate the effectiveness of the indicator.		
	Who	Inspection Requirements
General Model Validation		
1	Research or NRR	Validate the NEI spreadsheet and evaluate the need for an internal tool.
Plant Specific Model Validation - Active Component Identification		
2	SRI/RI	Audit two of the systems covered by the pilot performance indicator (one support cooling and one primary system) [page 2, Section PWRs], identify active components whose failure will fail the train; compare with the licensee's list of active components, and discuss discrepancies with the SRA. For the two audited systems provide a list of active [page F-7] components to Research and SRA.
3	Research	Ensure that all active components are modeled in the SPAR models.
4	SRI/RI	Ensure all active components are accounted for in the licensee's version of the NEI spreadsheet
Plant Specific Model Validation - Unavailability Boundary Definition		
5	SRI/RI	Ensure final guidance on system boundaries for determining unavailability is correctly implemented for the purpose of calculating the unavailability index [page 4, Clarifying notes, System/component Interface Boundaries].
Plant Specific Model Validation - Success Criteria		
6	SRI/RI	Review aggregate PRA success criteria [page 4, clarifying notes, success criteria] and determine if it adequately bounds the basic safety functions. SRIs to provide success criteria to SRA.
7	SRA	Verify that the PRA functional success criteria for the MSPI is consistent with Phase 2 SDP notebook basis and the SPAR model assumptions.
Plant Specific Model Validation - Data Entry		

Attachment 7

8	SRI/RI	<p>As discussed in the guidance, confirm appropriate baseline values are entered into the NEI spreadsheet.</p> <ul style="list-style-type: none"> • Planned Unavailability - actual plant specific 3-year total planned unavailability for train for years 1999-2001 [Appendix F, clarifying notes, baseline values]. • • Unplanned Unavailability - historical industry average for unavailability for years 1999 - 2001 [Appendix F, Table 1] • Baseline Unreliability - historical industry baseline calculated from unreliability mean values for each monitored component [demand failure, run/load failure, failure to meet mission time as applicable] in the system using industry average values [Appendix F, Table 2].
9	SRI/RI	<p>Confirm demand/failure data for active components for the most recent 12 quarters is correctly entered into the NEI spreadsheet to produce a Bayesian corrected component unreliability [page F2-3]</p> <ul style="list-style-type: none"> • number of failures on demand during previous 12 quarters • total number of demands during previous 12 quarters • number of failures to run during previous 12 quarters • total number of run hours during previous 12 quarters
10	SRI/RI	<p>Ensure actual unavailability data [page F1] is correctly entered into the spreadsheet.</p> <ul style="list-style-type: none"> • Critical hours during previous 12 quarters • Unavailable hours during previous 12 quarters, while critical
11	Research	<p>Ensure the maximum FV_{ur_c}/UR_{pc} and FV_{ua_c}/UA_{pc} values are correctly selected.</p>
Plant Specific Model Validation - General Model Performance		

12	Research	Check sensitivity of the performance indicator to demand failures over full range of expected demands (one zero problem; and insensitive over range of expected demands problem)
13	All	Anything else necessary to assure that MSPI will provide a good indicator for included components.