

## PRA Quality Expectations: Treatment of Uncertainties

To support risk-informed regulatory activities, the expectations for PRA quality need to be provided. These expectations are provided in Regulatory Guide (RG 1.200) which provides the staff endorsement of the standards and peer review guidance used to demonstrate conformance with the staff position. The standard does not provide guidance on how to perform the necessary PRA to meet the staff expectations; it only provides guidance on what needs to be in an acceptable PRA. There are guidance documents that are under development that provide this guidance. One such document is NUREG-1855.

In initiating this effort, NRC recognized that the Electric Power Research Institute (EPRI) also was performing work in this area with similar objectives. Both NRC and EPRI believed a collaborative effort to have technical agreement and to minimize duplication of effort would be more effective and efficient. NRC and EPRI have worked together under a Memorandum of Understanding and, as such, the two efforts complement each other.

The status of these two efforts is provided below.

NRC Effort -- NUREG 1855			EPRI Effort		
Document	Scope	Date Published	Document	Scope	Date Published
NUREG 1855, Main Report	For operating reactors <ul style="list-style-type: none"><li>• At-power</li><li>• Internal events</li><li>• Internal flood</li><li>• CDF and LERF</li></ul>	March 2009	Electric Power Research Institute, EPRI TR 1016737 ("Treatment of Parameter and Model Uncertainty for Probabilistic Risk Assessments")	For operating reactors <ul style="list-style-type: none"><li>• At-power</li><li>• Internal events</li><li>• Internal flood</li><li>• CDF and LERF</li></ul>	December 2008
NUREG 1855, Appendix A	Example Implementation Of The Process For The Treatment Of PRA Uncertainty In A Risk-Informed Regulatory Application	To be published as part of Revision 1	N/A	N/A	N/A

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Document	Scope	Date Published	Document	Scope	Date Published
NUREG 1855, Main Report , Revision 1	For operating reactors <ul style="list-style-type: none"> <li>• At-power</li> <li>• Internal events</li> <li>• Internal flood</li> <li>• CDF and LERF</li> <li>• Internal fires</li> <li>• Seismic</li> <li>• LPSD</li> <li>• Level 2</li> </ul>	Draft for comment, 1 <sup>st</sup> quarter of calendar year 2011 Final (Revision 1) end of calendar year 2011	EPRI TR 1016737, Revision 1	For operating reactors <ul style="list-style-type: none"> <li>• At-power</li> <li>• Internal events</li> <li>• Internal flood</li> <li>• CDF and LERF</li> <li>• Internal fires</li> <li>• Seismic</li> <li>• LPSD</li> </ul>	2011