

## NRR Resolutions to Public Comments on External Flooding RASP Handbook

No.	Comment	NRC Response
1.1	The document provides a comprehensive list of flood considerations, both probabilistic and deterministic, but provides no guidance on how to integrate the results to reach a conclusion.	Section 1 will be revised to clarify the purpose and scope.
1.2	It is not clear what the document is trying to lead the analyst to produce. Is it a full quantitative result? A bounding estimate for use with Appendix M? Qualitative input to Appendix M? All of the above?	Agree. Section 1 will be revised to provide clarification.
2.1	The first paragraph is very difficult to read (e.g., the first two sentences are 58 and 54 words, respectively). This could make it difficult for future readers to digest the contents. We respectfully suggest this section be edited for clarity and plain-English readability.	Agree. Section 1 will be edited for clarity.
3.1	The title should say "Sources", not "Source", as the contents of this section includes multiple sources of information.	Agree. The title will be revised.
3.2	This section jumps directly into a listing of various sources of information potentially relevant to a flooding evaluation. We respectfully suggest that future readers would benefit from a brief introductory paragraph explaining the intent of this section. Is the list of documents described in Section 2 meant to be exhaustive or suggestive? Is there some hierarchy among the documents listed in Section 2 (e.g., does UFSAR Chapter 2.4 come first in the sources listed because it is considered the most important? Does NUREG/CP-0302 appear last in the list because it is least important?)	Section 2 will be revised to provide clarification.
3.3	Not mentioned in the list of potential sources of information is the licensee's flooding PRA. If the licensee has a peer-reviewed flooding PRA, it should be utilized as a source of information for the NRC's flooding risk evaluation.	Agree. Description will be added.
3.4	The first paragraph on page 2 mentions spreadsheets containing risk information developed by NRR/DRA. If these spreadsheets are relied on by NRC staff, they should be made available to outside stakeholders, including industry and the public. Are they available in ADAMS?	Spreadsheets are not relied upon for making risk-informed decisions. The reference to those spreadsheets will be removed.
4.1	In the last sentence of the second paragraph, the introductory phrase should read "In addition,..."	Agree. Sentence will be revised.
5.1	On page 6, this section discusses combinations of events to be evaluated. Additional guidance is warranted for determining which combinations are appropriate to consider.	Examples will be provided as appropriate for this guidance.
6.1	The last sentence in the second paragraph reads: "Based on additional information that may be provided later, the assumption for complete failure of the barrier and, consequently, the protected SSCs may be revised and appropriate credits may be considered." What is this sentence supposed to convey to the risk analyst? What additional information? To be provided later – but when?	Staff agrees that the sentence should be revised for clarity.

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7.1	On page 9, there is a discussion of long-term RCIC operation. Experience at Fukushima has shown that RCIC is likely to have continued to run. There is a DOE sponsored activity to validate this information. The discussion should be revised so it does not imply that RCIC would always fail in these circumstances but rather its ability to continue to operate should be treated as a source of uncertainty using the latest information available from the DOE effort.	Agree. Clarification will be provided.
7.2	On page 9, the discussion of Performance Shaping Factors should note the limitations of the current methods when dealing with very long term actions such as flood protection and organization response.	Staff will review this section to make clarifications as needed.
8.1	The examples all involve non-Green SDP outcomes. At least one example involving a Green outcome would add value to future analysts trying to understand how the guidance has been applied in the past.	Agree. Section will be revised to provide a Green SDP example.
8.2	The examples describe the issue at play in each case, but provide no explanation of the reasoning that led to the conclusion reached. If the basis for the conclusion is provided in the cited NRC letter, at least a summary of the basis should be added to the description of the example presented in Appendix A. The basis for the conclusion is especially important for examples that involved the use of Appendix M.	Explanation for the reasoning are provided in NRC's transmittals to the licensees. In response to this comment, staff will explore whether additional information can be included in the RASP guidance to enhance clarity & predictability.
9.1	As summarized in Appendix B, Example B.1 seems a poor illustration of the Performance Shaping Factor "Available Time". The activity featured in this SDP (construction of the bin wall) is a major construction project, not the action of an individual that is typically associated with time as a PSF. We respectfully suggest that this example be replaced with one more obviously tied to a traditional application of time as a PSF or rewrite the summary of this case so the link is more apparent.	Staff will review the example and will replace the example if appropriate.
9.2	The power of all the examples presented in Appendix B could be enhanced by stating in the summary description of each one exactly how the PSF was evaluated and why. The importance of, and thinking to be applied to the evaluation of, the other PSFs would be enhanced by adding examples to those not presented with an example (e.g., B.2, Accessibility; B.3, Environmental/Stress Factors; B.4, Diagnostic Complexity, Indications and Cues; B.7, Staffing; B.8, Communication).	Staff will provide additional information on evaluation of PSFs in presented examples, as available and appropriate for this guidance. For some PSFs, relevant examples are not available.
10.1	Appendix C is mentioned only in Section 1 (Objectives and Scope). Hence, it is not clear how Appendix C and its enclosed Tables 2a and 2b are to be used. It is also not clear what data should be used for other types of flooding events.	Agree. Clarification will be provided.