

Response to Review Questions for Regulatory Guide (RG) 1.113 "Estimating Aquatic Dispersion of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I"

(1) What are the known technical or regulatory issues with the current version of the RG?

The current RG provides guidance and discussion of analytic solutions to aquatic dispersion of liquid effluents for the sole purpose of implementing Appendix I to 10 CFR 50 — "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion "As Low as is Reasonably Achievable" for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents". The last revision of the RG dates to 1977, which means Section A "Introduction" Section B "Discussion," and Section D "implementation" are outdated. However, for the intended purpose, the technical guidance remains appropriate and can be used until the other sections are updated.

(2) What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of licensing and inspection activities?

There is no immediate impact on stakeholders of not updating the RG at this time. Staff and external stakeholders are currently using software that was developed by NRC to implement their programs to meet the requirements of Appendix I to 10 CFR 50. Few, if any, license amendments are anticipated. ANS has initiated development of a standard (ANS-2.18, "Standards for Evaluating Radionuclide Transport in Surface Water for Nuclear Power Sites") that will encompass the entire scope of the RG. NRC will consider referencing or endorsing this standard in the next revision of the RG. However, the action by the committee to develop the standard has been delayed due to a change in the chair of the committee. No formal meeting has been scheduled as of July 2013. In spite of this, there is no impact to not updating the RG prior to release of ANS-2.18.

(3) What is an estimation of the level of effort needed to address identified issues in terms of FTE and contract dollars?

Revision of the RG will take 0.1 FTE of NRC staff time. The only effort will be in reviewing the references to see if they contain significant changes in methodology, and to consider use of ANS 2.18. No contract dollars are anticipated to be needed.

(4) Based on the answers to the questions above, what is the proposed staff action for this RG?

No changes needed.

(5) If a RG should be revised, provide a conceptual plan and timeframe to accomplish this.

Not applicable.