

February 28, 2007

MEMORANDUM TO: Douglas W. Weaver, Chief
Guidance, Infrastructure, and Financial Review Branch
Division of New Reactor Licensing
Office of New Reactors

FROM: Cornelius F. Holden, Director /RA/
Division of Risk Assessment
Office of Nuclear Reactor Regulation

SUBJECT: TRANSMITTAL OF PROPOSED REVISION TO STANDARD REVIEW
PLAN NUREG-0800 SECTIONS 2.3.2, REV 3, 2.3.4, REV 2 AND
2.3.5, REV 3

The purpose of this memorandum is to transmit the proposed revisions to NUREG-0800, Standard Review Plan (SRP), Sections 2.3.2, Rev. 3, "Local Meteorology," 2.3.4, Rev. 2, "Short-term Atmospheric Dispersion Estimates for Accident Releases," and 2.3.5, Rev. 3, "Long-Term Atmospheric Dispersion Estimates for Routine Releases." These documents are technically complete, reformatted in conformance with LIC-200, "Standard Review Plan Process," and are designated "publically available."

In accordance with the staff requirements memorandum dated May 10, 2005, on the April 6, 2005 Commission meeting, the Office of Nuclear Reactor Regulation (NRR) and the Office of New Reactors (NRO) have revised SRP Sections 2.3.2, 2.3.4 and 2.3.5 (Enclosures). The present revisions update the April 1996 Drafts. The revised portions of the SRP Sections have been highlighted to aid in identifying the technical information that has been added or revised.

In addition, these revisions have been administratively updated in accordance with NRR Office Instruction, LIC-200. The administrative update is comprised of assigning the review responsibilities by function, with the responsible organizations maintained separately from the SRP itself to minimize impacts of office reorganizations, and editorial and formatting changes. The revision also adds standard paragraphs to extend application of the updated SRP section to prospective submittals by applicants pursuant to 10 CFR Part 52.

The enclosed proposed revisions for SRP Sections 2.3.2 and 2.3.5 represent updates to the draft revision 3 versions dated April 1996 and the proposed revision for SRP Section 2.3.4 represents an update to the draft revision 2 version dated April 1996. The technical changes that the staff is proposing are summarized at the end of each of the enclosed proposed SRP sections. There were also changes to each of the SRP sections updating (1) the list of applicable regulations and acceptance criteria and (2) the review procedures to make them more specific to the application type (ESP, DC, and COL/CP applications referencing an ESP and/or a DC).

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There were several significant technical additions and modifications, most notably in Section 2.3.4. The proposed revisions to SRP Section 2.3.4 include expanding the scope of the section to include the review of atmospheric dispersion estimates for design-basis accidental radioactive airborne releases to the control room pursuant to Regulatory Guide 1.194, "Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants," adding a discussion regarding the use of a hemispheric cloud configuration assumption to model puff releases, adding a discussion concerning the use of a "sliding window" approach as an alternative method for calculating offsite atmospheric dispersion factors for time periods greater than 2 hours, suggesting that some distance of separation (e.g., at least 10 meters) should be maintained between potential release pathways and potential intake pathways to the control room, and providing a methodology for determining control room atmospheric dispersion factors when the source-to-receptor distance is less than 10 meters.

The staff has determined that the changes do not involve any new staff positions. I understand that most of the SRP sections will be issued as final versions without publishing them as draft and requesting comment. The staff is revising the SRP in this manner to provide a more up-to-date SRP in light of the requirement in 10 CFR 50.34(h) for an applicant to evaluate its facility against the SRP revision in effect six months before the docket date of the application. In addition, this memo and its enclosures will be made publicly available as a preliminary SRP section revision. It will be formally published following reconciliation against the ongoing Part 52 rulemaking and regulatory guide updates, including DG-1145, "Combined License Applications for Nuclear Power Plants (LWR Edition)." After formal issuance, the SRP will be available for public comment. Comment resolution will be addressed in subsequent SRP revisions. Prior to revision to individual sections, comment resolution may establish a basis for how alternatives to the NUREG-0800 acceptance criteria provide an acceptable method of complying with the NRC's regulations.

For questions concerning these documents, please contact Brad Harvey at 301-415-4118.

Enclosures:
As stated