

October 23, 2006

MEMORANDUM TO: Douglas W. Weaver, Branch Chief  
New Reactor Infrastructure Guidance Development Branch  
Division of New Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: William H. Bateman, Director /RA/  
Division of Component Integrity  
Office of Nuclear Reactor Regulation

SUBJECT: TRANSMITTAL OF PROPOSED REVISION TO STANDARD REVIEW  
PLAN NUREG-0800 SECTION 4.5.2, REV 3, "REACTOR INTERNAL  
AND CORE SUPPORT STRUCTURE MATERIALS"

The purpose of this memorandum is to transmit the proposed revision[s] to NUREG-0800, *Standard Review Plan (SRP)*, Section 4.5.2, Rev. 3, "Reactor Internal and Core Support Structure Materials," to you for consideration. This document is technically complete, reformatted in conformance with LIC-200, and may be 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) has revised SRP Section 4.5.2 (Enclosure). The revised technical portions of the SRP Section have been highlighted to aid in identifying the technical information that has been added or revised.

The present revision updates Revision 2, dated April 1981, and includes most of the changes introduced in the draft Revision 3 of April 1996. Several specific technical changes to Revision 2, dated April 1981, including those introduced in the 1996 draft are worth noting:

1. Citations of the ASME Code, Section III, were updated throughout the SRP section to accurately reflect current Editions of the ASME Code;
2. Citations of Regulatory Guide 1.84, "Design and Fabrication and Materials Code Case Acceptability, ASME Section III," were added or updated throughout the SRP section;
3. Review procedures were added to address the proposed use of cast austenitic stainless steels for reactor internal and core support structure materials; and
4. Review procedures addressing the proposed use of Ni-Cr-Fe alloys as reactor internal and core support structure materials were added to reflect updated operating experience.

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Additional changes are summarized at the end of the SRP section revision, itself.

In addition, this revision has been administratively updated in accordance with NRR Office Instruction, LIC-200, Standard Review Plan Process. 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 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 enclosure 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 this document, please contact Chris Syndor of my staff at 301-415-6065.

Enclosure:  
As stated