

September 8, 2006

MEMORANDUM TO: John T. Larkins, Executive Director  
Advisory Committee on Reactor Safeguards/  
Advisory Committee on Nuclear Waste

FROM: David B. Matthews, Director Tom Bergman for */RA/*  
Division of New Reactor Licensing  
Office of Nuclear Reactor Regulation

SUBJECT: TRANSMITTAL OF PROPOSED DRAFT REVISION TO STANDARD  
REVIEW PLAN, NUREG-0800, SECTION 13.3, "EMERGENCY  
PLANNING"

The purpose of this memorandum is to transmit the proposed revision of Section 13.3, "Emergency Planning," of the *Standard Review Plan* (SRP) (NUREG-0800) to the Advisory Committee on Reactor Safeguards (ACRS) for their consideration.

In accordance with the May 10, 2005, Commission Meeting staff requirements memorandum (SRM) M050406, the Office of Nuclear Security and Incident Response (NSIR), in cooperation with the Department of Homeland Security (DHS) and the Office of Nuclear Reactor Regulation (NRR), has developed a revised SRP Section 13.3 (enclosed) as a draft. This revision will ensure that up-to-date guidance is available for the staff responsible for reviewing and licensing new sites and new reactors. The proposed revision is a rewrite of the July 1981 SRP Section 13.3, Revision 2, and provides staff guidance for the review of emergency planning information submitted in license applications under 10 CFR Parts 50 and 52.

The proposed revision will be issued as a draft document for comment, in accordance with the May 8, 2006, NRR Office Instruction LIC-200, Revision 1, "Standard Review Plan (SRP) Process." The schedule for publication of the proposed revision, including incorporation of stakeholder comments, will allow for the publication of the final revision 6 months before the docket date of the first combined license application, which is anticipated in September 2007.

In addition to updating the July 1981 SRP section, the proposed revision includes some of the proposed changes in the April 1996 draft Revision 3 to SRP Section 13.3. The proposed revision consists mostly of changes that identify specific regulations and guidance, and provides SRP acceptance criteria for the various applications submitted under both 10 CFR Parts 50 and 52. The most significant changes reflect the new application processes allowed by 10 CFR Part 52. This also includes the incorporation of Commission policy on the use of

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emergency planning inspections, tests, analyses, and acceptance criteria (EP-ITAAC), which is addressed in the February 22, 2006, SRM SECY-05-0197, "Review of Operational Programs in a Combined License Application and Generic Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria" (ML052770225). In addition, the proposed revision incorporates experience gained from the first three early site permit (ESP) application reviews, and the standard design certification applications. The license application review processes in both 10 CFR Part 50 and Part 52 utilize the same existing emergency planning requirements contained primarily in 10 CFR 50.47 and Appendix E to Part 50.

While the proposed SRP Section 13.3 revision is a complete rewrite of Section 13.3, it does not contain new or unreviewed staff positions. It does, however, identify a new NUREG/CR report on evacuation time estimates (ETEs). Guidance on the development of ETEs was provided in November 1980 in NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," and that guidance is still used today. The staff will continue to use the established guidance and criteria in Appendix 4, "Evacuation Time Estimates Within the Plume Exposure Pathway Emergency Planning Zone," of NUREG-0654/FEMA-REP-1, as the basis for compliance with applicable regulations.

The new (January 2005) ETE report, NUREG/CR-6863, "Development of Evacuation Time Estimate Studies for Nuclear Power Plants," is identified in the proposed SRP Section 13.3 revision as providing information relating to performing an ETE analysis. In March 1992, NUREG/CR-4831, "State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants," was written to provide updated information, assumptions, and methods to be used in performing ETE studies. NUREG/CR-6863 updates NUREG/CR-4831 and integrates new technologies in traffic management, computer modeling, and communication systems to identify additional tools useful in the development of new, or updates to existing, ETEs.

The proposed revision does introduce the option to use EP-ITAAC in an ESP application, which is consistent with the ongoing 10 CFR Part 52 rulemaking (see proposed 10 CFR 52.17(b)(3)). Prior to the current 10 CFR Part 52 rulemaking, the rules only addressed the use of EP-ITAAC with a combined license (COL) application but not at the ESP stage. The staff's position, which is supported by public comments, is that the extension of EP-ITAAC to ESP applications is not precluded in the existing rules, and is necessary in order to accommodate an applicant's submission of a "complete and integrated emergency plan" at the ESP stage, as well as provide an additional level of flexibility for an ESP applicant. Without allowing the use of EP-ITAAC (or other such placeholders) at the ESP stage, the staff would be unable to reach a reasonable assurance finding at the time of application. The use of EP-ITAAC would allow the staff to make its findings based on proposed, and not yet implemented, emergency plans. Table 13.3-1 provides a proposed set of allowable EP-ITAAC (for use at either the ESP or COL application stage). The asterisked/bolded text in the table represents the earlier set of COL EP-ITAAC that was approved by the Commission in SRM SECY-05-0197. Table 13.3-1 reflects a process of review allowed by 10 CFR Part 52, and does not contain new or unreviewed staff positions relating to emergency planning requirements. Of note, the initial three ESP applications requested approval of major features of emergency plans, only. The use of EP-ITAAC is not applicable to these reviews, as it applies to complete and integrated plans. In contrast, the Vogtle ESP application did submit complete and integrated plans with EP-ITAAC.

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Based on the nature of the changes, the staff will be publishing the proposed revision for public comment. Please coordinate with the technical contacts identified below and NSIR to schedule an ACRS briefing on this subject. Also, the staff has determined that the changes do not involve any backfits; therefore, we will be requesting a waiver of review from the Committee to Review Generic Requirements.

For questions concerning this document, please contact Stephen Koenick of my staff at 301-415-1239, or Bruce Musico (NSIR/DPR) at 301-415-2310.

Enclosure  
SRP Section 13.3