

RESPONSE TO PUBLIC COMMENTS ON DRAFT STANDARD REVIEW PLAN 19.4: STRATEGIES AND GUIDANCE TO ADDRESS LOSS OF LARGE AREAS OF THE PLANT DUE TO EXPLOSIONS AND FIRES

On June 11, 2013, a Notice of Opportunity for Public Comment was published in the Federal Register (78 FR 35072) on the proposed Revision 0 to NUREG-0800, Standard Review Plan (SRP), Section 19.4. This revision included a draft (new) U.S. Nuclear Regulatory Commission (NRC) SRP 19.4 "Strategies and Guidance to Address Loss of Large Areas of the Plant due to Explosions and Fires" to provide staff guidance in reviewing submittals on loss of large areas of the plant. Comments were received from one (1) organization.

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The NRC staff's review and disposition of the comments are provided in the following table.

No.	Reference	Comment Submissions	NRC Resolution
1.	Page 19.4-3 Acceptance Criteria	<p>In the discussion of review against 10 CFR 50.54(hh)(2) there is no reference to Interim Staff Guidance (ISG) 016 being superseded by SRP, Section 19.4 once it is issued.</p> <p>The ISG is an interim guidance which should be replaced by the SRP Section 19.4 once it is issued.</p>	Staff agrees. Once SRP Section 19.4 is issued, it will replace ISG 016. There is no need for discussion in the SRP. However, the <i>Federal Register</i> notice for issuance of SRP Section 19.4 includes an explanation of how SRP Section 19.4 replaces ISG-016.

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2.	Page 19.4-4 Staff Position	<p>All the emphasis seems to be on Phase 1 and following the February 25, 2005 guidance whereas most of the detail in the Mitigating Strategies Document (MSD) template (App. D to NEI 06-12, Rev.3) deals with Phase 2 and Phase 3.</p> <p>There should be less emphasis on Phase 1 for the COL phase and more emphasis for descriptions of Phase 2 & 3 strategies which make up most of App. D.</p>	<p>Staff disagrees. Many items in Phases 2 and 3 were covered in Appendix A of ISG 016. These same items are covered in SRP Section 19.4.</p>
3.	Page 19.4-5 Proposed License Condition	<p>NRC proposed License Condition: "...incorporated in the standard license conditions in Chapter 13 of the FSAR...."</p> <p>License conditions are in Part 10 of a COL Application, not in the FSAR (Part 2). Table 13.4-201 in FSAR Chapter 13 references license conditions for some programs, which are actually in Part 10 of the COLA.</p> <p>ISG-015 provides multiple avenues for implementation of Post COL actions or commitments. The SRP does not need to be prescriptive on how this is implemented.</p> <p>Commitments vs License Condition may provide a more detailed schedule implementation as program aspects may be required at different dates (i.e., 6 months prior to fuel load for programmatic and procedure elements and prior to fuel load for training elements).</p>	<p>The staff agrees in part. License conditions are in Part 10 of a COL application for many applications, but some COL applications do not include a Part devoted to license conditions. Notwithstanding these variations, it is the NRC staff that ultimately controls the inclusion of conditions to the license. Therefore, the following sentence is being added to section II.1:</p> <p>"The reviewer should verify that a license condition related to 10 CFR 50.54(hh)(2) is included that addresses (1) implementation of specified programs and (2) submitting schedules to support planning for and conduct of NRC inspections. "</p>

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4.	Page 19.4-6 Item 3. Airlifted Resources	<p>The criteria establishes a two hour response and MOU or discussion of the agreement to provide such resources.</p> <p>Resources may or may not be available or may be controlled by other authorities (state or Federal) and therefore, no written or verbal agreement would be provided in some cases.</p> <p>The original NRC inspection wording is conditional that the "licensees were expected to look for airlifted resources using a 2-hour total response criteria." The wording should reflect that airlifted resources should be assessed not that airlifted resources are required.</p>	<p>The staff disagrees. In the draft SRP, the applicant was to assess the availability of airlifted resources that could be obtained in a 2 hour door to door response time. The staff is aware that there may be situations in which a site may not be able to obtain airlifted resources within the two hour time frame. In this situation, the applicant should state this in the application. However, the applicant should still make an assessment, identify needed offsite equipment, and identify offsite resources. The licensee should still establish the necessary MOUs with their offsite resources to transport/obtain the needed equipment.</p> <p>The expectation is that the licensee is to assess the situation (given an event) and, if needed, to utilize the established MOUs to receive needed offsite equipment. The goal for the MOU is to have equipment arrive within 2 hours once the MOU is activated.</p>

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5.	General Comment with reference to Comment #4 above	<p>As the NRC states in the footnote on 19.4-1: "The SRP is not a substitute for the NRC's regulations, and compliance with it is not required."</p> <p>As a beyond design basis accident the stated goal is to provide flexibility of response to meet the regulation, care should be taken to ensure the SRP does not reflect an overly prescriptive response. (e.g., see Item 3 above).</p> <p>The wording in the SER for operating plants is almost identical to the wording in this revision to the SRP with one notable exception. Where the SER included the "It is the staffs expectation to evaluate..." , the SRP removes the conditional wording and states as a requirement. Care should be taken to ensure SRP is not overly prescriptive.</p>	<p>The staff agrees in part. The word "require" is not used in the draft SRP acceptance criteria unless it refers to requirements in 10 CFR Part 50. However the staff understands that using the word "require" is not the only way to state a requirement. The staff reviewed the SRP and made modifications that changed a "requirement" to a discretionary action. For example, the term "is to be" was changed to "should be" and the term "will" was changed to "should."</p>
6.	Page 19.4-9 Mass Casualties and Triage Areas	<p>These two Phase 1 items are one item in the Mitigating Strategies Table (MST) that is part of the MSD described in App. D of NEI 06-12.</p> <p>If SRP Section 19.4 is going to continue to emphasize more detail on Phase 1 items than is intended by App. D, then SRP Section 19.4 must give some guidance on just how much detail is needed in the MST/MSD. The current MSD's do not have a lot of detail in the MST on these Phase 1 items.</p>	<p>The staff disagrees with the comment. The SRP provides sufficient detail for review of these two items. Item 13, "Mass Casualties," in the final SRP section provides guidance for the handling of a mass casualty situation. The procedures should be preplanned and addressed in site guidelines. The use of a county or state mass casualty plan is acceptable. If a county or state plan is not utilized, then there should be assurances that the medical/MOU response framework can deliver adequate medical capabilities.</p> <p>Item 14, "Triage Areas," in the final SRP section provides the guidance for triage areas. Triage areas should be in an appropriate location(s), of sufficient size, and documented in plant guidelines.</p>

No.	Reference	Comment Submissions	NRC Resolution
7	<p>Page 19.4-10, SRP Acceptance Criteria #15. "Use of Plant Equipment During Loss of Power Situations",</p> <p>"procedures to start an emergency diesel generator without direct current (dc) power,..."</p>	<p>Some diesel generator designs do not allow this and alternatives proposed by licensees have to be reviewed and accepted when demonstrated to achieve the intent of the strategies.</p> <p>Passive reactor designs have diesel generators but not safety related "emergency" generators. Wording should be added to clarify this aspect.</p> <p>Per the implementation guidance on Pg. 19.4-15 applicants may propose an acceptable alternative for complying with the strategies being discussed in NEI Guideline NEI 06-12.</p>	<p>The staff agrees in part. If the section of the SRP is not applicable to the applicant, it is to state this in the application and provide justification. If an applicant chooses to invoke an alternative means of compliance, then it needs to present its alternative as required in 10 CFR 50.34(h) and 10 CFR 52.79(a)(41).</p> <p>Item 15 in the draft SRP "Use of Plant Equipment During Loss of Power Situations," is now item 18 in the final SRP.</p> <p>The first sentence of item 15 on page 19.4-10 of the draft SRP was changed to the following: "The reviewer should verify that the applicant describes the procedures to start any backup electrical device without direct current (dc) power...."</p>
8	<p>Page 19.4-11, SFP Mitigative Measures</p>	<p>Most of what is in this guidance is just what was issued as Phase 1 guidance. There was significantly more guidance issued as part of Phase 2 and that should be presented in SRP Section 19.4 so that varying approaches to maintaining SFP cooling can be presented for evaluation.</p> <p>For example, AP1000 was approved using water spray cooling but COL Applicants also had to make a commitment related to air cooling.</p> <p>Language in the 3rd and 4th paragraphs of section 17 are related to air cooling and applicability should be clarified.</p>	<p>The staff agrees and the following wording was added to Item 20, "SFP Mitigative Measures," in the final SRP section:</p> <p>"The applicant should develop procedures/guidance to enhance air cooling of fuel in the SFP, in the event spray cooling cannot be established. This can be accomplished by promoting passive ventilation of the bulk air space above the pool with the environs (e.g., opening doorways or blowout panels, etc.)."</p>
9	<p>Page 19.4-12, Item 20</p>	<p>Typo: "This item in not applicable" should be "This item is not applicable".</p>	<p>Typo fixed</p>

No.	Reference	Comment Submissions	NRC Resolution
10	Page 19.4-14 Evaluation Findings 1. New Reactor Applications	<p>The statement is made "The NRC staff concludes that the program and associated implementation milestone(s) are included within the license condition on operational programs and implementation."</p> <p>This statement is not accurate. The LOLA program is not an operational program that falls within the license conditions or the FSAR Table 13.4-201. It is a program that is beyond design basis and has a separate license condition for its implementation and milestones. There are several other programs that fall outside Table 13.4-201 and they are listed separately to distinguish them from the formal operational programs.</p>	<p>The staff agrees. The sentence on page 19.4-16 of the draft SRP was changed to read as follows:</p> <p>"The NRC staff concludes that the program and associated implementation milestone(s) are included within the license condition."</p>
11	Appendix A, Page 19.4-18 through 24	<p>PWR Owners Group recommendations</p> <p>The PWROG document should be listed as a reference on Page 19.4-15. Would this be part of the evaluation criteria and included in the SER?</p>	<p>Reference to this document in the final SRP has been removed. Reference Number 7 in the reference section has been deleted.</p>