

Public Comment Resolution – DG-1218

Comments from the Nuclear Energy Institute (NEI) and the Tennessee Valley Authority (TVA)

The NEI document contained the entire text of DG-1218 in a table, with numbered rows. Only rows that contained comments were retained in the table below, so that there are gaps in the numbers. TVA endorsed the comments provided by NEI.

Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

Comment #	Comment	Resolution
Generic Comment 1	In various passages, the Regulatory Guide refers to ‘methods’ in the context of the Fire PRA or risk assessment methods. In all instances, the term ‘method’ or ‘methods’ should be changed to ‘method of treating the cause/effect relationship’ or ‘methods of treating the cause/effect relationship’.	The NRC (staff) agrees that references to PRA “methods” should be consistent and clear. Several sections of Draft Regulatory Guide (DG) 1218 refer to PRA methods, so the guide was edited to clarify the context of the term “methods” in the following places: C.2.2.4, C.3.1, C.3.2.4, and C.4.3. Incorporation of NEI comment #25 removed the only instance of “method” from C.2.2.4. The sample license condition in section 3.1 was modified to reflect the wording in the National Fire Protection Association (NFPA) standard NFPA 805 section 2.4.3.3, changing “NRC [Nuclear Regulatory Commission] approval” to “acceptable to the NRC.” See also the resolution of comment #75 for further information.
Generic Comment 2	When referring to NEI 04-02, please include both the ‘text reference’ and the ‘Appendix reference’.	This comment is presumed to relate to references to NEI 04-02 in DG-1218 Section C, Regulatory Position, only. The staff reviewed the references to NEI 04-02 in DG 1218, Section C, and verified the appropriateness of the references. A reference to NEI 04-02 Appendix B-3 was added to Section C 2.3.2. Otherwise see the resolution of Comment 17a below for further information on referencing NEI 04-02.
Generic Comment 3	Definition of “Acceptable to the AHJ” The Regulatory Guide should clearly articulate a definition of how the NRC intends to interpret the phrase “Authority Having Jurisdiction”. Specifically, NFPA 805 states that, “For the Fire PRA (FPRA) utilized under NFPA 805, the “approach, methods and data shall be acceptable to the AHJ.” In order to determine acceptability, the parts of the PRA required by the application	The staff interprets the comment to be a request that the italicized text in the comment (taken verbatim from Standard Review Plan (SRP) 19.2 Section III.2.1)) should be included in the Regulatory Guide (RG) 1.205 based on concerns that, otherwise, the staff will not appropriately apply this guidance to applications under 10 CFR 50.48(c). The staff disagrees that this action is necessary because the guidance is already contained in the NRC document that describes how the staff should review all licensee applications that rely on PRA results. In response to this comment and a number of related ones (NEI

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	<p>are to be assessed for technical adequacy. For the purpose of this assessment, the NRC has determined that the implementation of Regulatory Guide 1.200 constitutes an acceptable process adequate to certify that the PRA approach, methods, and data are acceptable for the PRA to be applied to NFPA 805. Implementation of Regulatory Guide 1.200 should obviate the need for staff review of the base FPRA for which a standard and a corresponding appendix to Regulatory Guide 1.200 exist. A staff review of those PRAs for the risk contributors significant to the decision and for which no standard has been endorsed in Regulatory Guide 1.200 will be necessary to the extent needed to support the decision. However, even for the risk contributors addressed by standards, the staff may, under certain circumstances, decide to perform an audit to verify the technical adequacy of the PRA. An audit may be initiated for a number of reasons, some of which are identified below:</p> <ul style="list-style-type: none"> ▪ <i>Lack of evidence that the self-assessment actions that are most relevant to the application have been adequately performed.</i> ▪ <i>Concerns about the resolution of peer review findings associated with the technical requirements that are most relevant to the application.</i> ▪ <i>Contributors (e.g., accident sequences, cutsets, operator actions) to the results that differ from those seen at other, similar plants, and for which no plant specific design features can be identified that would explain the differences.</i> ▪ <i>Results that seem to be counterintuitive, e.g., a decrease in CDF when equipment is taken out of</i> 	<p>generic comment #1; comments #14, 71, 73, 74, and 75), the staff has made significant changes to DG-1218 which clarify what “methods” the staff will review and how such a review will be accomplished. For example, regulatory Position 4.3 of DG-1218 has been revised to describe how the staff addresses PRA technical adequacy.</p>

¹ Note that this applies also to approaches, methods or data that are new and may lack rigorous proof. In such cases the use of a formal, structured expert elicitation process that is equivalent in rigor to that used by the SSHAC (NUREG/CR-6372), that includes full consideration of uncertainties, and that is subjected to an independent review in addition to the peer review required under RG 1.200 shall be deemed as resulting in an approach, method, or data acceptable to NRC.

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	<p><i>service.</i></p> <ul style="list-style-type: none"> ▪ <i>Estimates of CDF or LERF that differ significantly from those in prior submittals from the same licensee, without a sufficient explanation.</i> <p>With respect to the technical adequacy of the FPRA for NFPA 805, the NRC has determined that a PRA that achieves Capability Category II for all technical elements is acceptable for NFPA 805. Licensees should justify use of Capability Category I for specific supporting requirements in their NFPA 805 risk assessments if they contend that it is adequate for the application.</p> <p>The NRC and EPRI have documented a comprehensive methodology for conducting a fire PRA in NUREG/CR-6850/EPRI 1011989, “EPRI/NRC-RES Fire PRA Methodology for Nuclear Power Facilities” (Ref. 30). The NRC accepts the use of the fire PRA methods in this document for NFPA 805 risk assessments, including extension of any screening or scoping methods to more detailed plant-specific analyses, when warranted. In addition, NRC may issue additional guidance as to methods that are acceptable to NRC. However, such methods are only one way to demonstrate technical adequacy of the FPRA. Any approach, method or data that is determined through the RG 1.200 process to meet the requirements for Capability Category II (or Capability Category I, where that is demonstrated to be sufficient for the application) is deemed to be acceptable to NRC [AHJ] for application to NFPA 805.¹</p>	
3	<p>[A. INTRODUCTION] This paragraph was revised from the original revision of Regulatory Guide 1.205. The wording with respect to NFPA 805 and 10 CFR 50.48(c) was better in the original revision. DG-1218 states that NFPA 805 is taken to mean compliance with NFPA 805 and applicable portions of 10</p>	<p>The staff acknowledges the comment. DG-1218 was revised to refer to 10 CFR 50.48 and the applicable portions of NFPA 805.</p>

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	CFR 50.48(c). Regulatory Guide 1.205 states that NFPA 805 is taken to mean compliance with 10 CFR 50.48(c). Since 10 CFR 50.48(c) incorporates NFPA 805-2001 by reference including exceptions to NFPA 805 the wording in the current reg. guide is more appropriate. Suggest the wording of Regulatory Guide 1.205 be retained.	
4, 5, and 6	<p>[The regulatory positions in Section C below include clarification of the guidance provided in NEI 04-02, as well as any NRC exceptions to the guidance. The regulatory positions in Section C take precedence over the guidance in NEI 04-02.]</p> <p>This statement is “open-ended”. Exceptions to NEI 04-02 should be explicitly documented in Regulatory Guide 1.205. NEI 04-02 Revision 1 was reviewed and endorsed, with exceptions, in Regulatory Guide 1.205 Rev. 0 and the incorporated FAQs have undergone an appropriate review, endorsement, and closure process. Specific exceptions should be identified and not rely on licensees and inspectors to individually interpret NFPA 805 without the benefit of a vetted guidance and endorsement process.</p>	<p>The staff does not agree that the statement is “open-ended,” but, rather, it states the proper hierarchy between RG 1.205 and the industry guidance. The statement about precedence is in the existing RG 1.205.</p> <p>The staff notes that explicit exceptions to NEI 04-02 have been included in DG-1218 in section C.1.2. The staff notes that, as with the current RG 1.205, DG-1218 does not include many specific exceptions to NEI 04-02, but includes implicit exceptions in that it provides regulatory positions in most of the key areas related to NFPA 805, even when those areas are discussed in detail in NEI 04-02. The ongoing pilot plant process has resulted in greater understanding of NFPA 805 requirements, necessitating clearer guidance be provided including the development of numerous frequently asked questions (FAQs), many of which are not yet completed. The complexity of the NFPA 805 process has resulted in a 200+ page NEI document with some repetition and overlapping discussions. Attempting to identify each sentence or phrase in NEI 04-02 to which the staff is taking an exception, explaining each exception, and providing a staff endorsed alternative would result in an extremely complex document. The current and proposed versions of RG 1.205 are structured to provide a coherent framework describing the process endorsed by the staff and thereby minimizing licensee and inspector interpretations of individual sentences and phrases and associated “staff exceptions.”</p> <p>A change to DG-1218 was not made because exceptions have been included in section C.1.2.</p>
11	B. <u>DISCUSSION</u> Background	The staff agrees with this comment, and simplified the background section of DG-1218.

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	Recommend change to "...NEI worked with the industry and the NRC to develop". The NRC was extensively involved in the review and issuance of NEI 04-02 from its inception.	
12	<p>Fire Protection Program Changes</p> <p>Regulatory Guide 1.205 made specific reference to the regulatory position that defined the new license condition while DG-1218 does not. Suggest adding the appropriate reference to the correct regulatory position.</p>	The staff agrees with the comment and added a sentence to reference Regulatory Position C.3.1.
13	<p>Appendices to NFPA 805</p> <p>Regulatory Guide 1.205 has a statement "The staff finds the specific guidance contained in those appendices to be acceptable to the extent that the guidance is specifically endorsed within the positions contained in Section C of this regulatory guide." This sentence has been deleted from DG-1218. Suggest that the sentence be added unless there are no endorsements of any of the guidance in these appendices. If the staff does not endorse any guidance in those appendices then a statement to the affect should be added.</p>	As stated in the statement of considerations, the appendices to NFPA 805, which are not part of the standard, are not incorporated by reference and have not been reviewed for endorsement. Lack of endorsement does not imply unacceptability, so the sentence was deleted from DG-1218. The commenter did not explain why adding the sentence back into the guidance would be useful and no changes were made to DG-1218.
14	<p>Fire Probabilistic Risk Assessment</p> <p>(Letters added by NRC staff for clarity of resolution.)</p> <p>a) First sentence on the possibility of transition to an NFPA 805-based FPP without a fire PRA; it seems to imply that it may still be feasible to do so without a fire PRA.</p> <p>b) The reason given for using a fire PRA versus other methods is partially correct; however, it is not clear to what extent the fire PRA used during the transition may be updated or changed after the transition and is still considered acceptable derivatives of</p>	<p>a) The staff has changed the DG-1218, Regulatory Position 4.3, to more properly state that a technically adequate fire PRA analysis for all areas in the facility that rely on a risk-informed, performance based approach is required. If a risk-informed approach is not used at all, much of the guidance in RG-1.205 will not be applicable (e.g., the standard licensee condition in C.3.1) and licensees should propose an alternative approach.</p> <p>b) DG-1218 reflects the appropriate rule requirements on PRA update: NFPA 805 Section 2.4.3.3 states that all change in risk calculations shall use a PRA based on the as-built and as operated and maintained plant. At a minimum to support NFPA-805, the PRA must be updated, or evaluated and found to not</p>

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	<p>approved methods (in other words, approved PRA methods in NFPA 805 SER plus improved PRA update process according to accepted PRA practice as endorsed in Reg. Guide 1.200) without prior NRC approval.</p> <p>c) In addition, if a new regulatory requirement on the scope of fire PRA (shutdown and other external events) is promulgated, would it become necessary to expand the approved PRA model or its derivatives (updated and upgraded in accordance with prevailing Reg. Guides as applicable) which may change the conclusions of the importance or risk significance of certain selected FPP either favorably or adversely?</p>	<p>need updating, whenever a change in risk calculation must be performed. More frequent updates are acceptable but there are no periodic update or maintenance requirements in the rule. Regulatory Position 4.3 of DG-1218 was revised to clearly refer to RG 1.200 and the PRA standard, which include update guidance generally considered good industry practice.</p> <p>c) If a licensee chooses to use a shutdown fire PRA to perform fire risk evaluations or plant change evaluations, then it would be expected to meet endorsed standards applicable to that PRA model. Changes in regulatory guidelines that affect the baseline PRA need to be incorporated into the baseline PRA when evaluating future changes and the cumulative effect of previous changes for any risk-informed application. If such changes in the baseline PRA causes the cumulative effect of previous and proposed changes to exceed that acceptance guidelines (as described in RG 1.174), the licensee should propose additional or alternative facility changes in order to meet the acceptance guidelines. As clarified in DG-1218, the PRA model of the as-built, as-operated facility at the end of the transition process is to be the baseline model of the facility from that point onward. The revision of RG 1.200 that will be used for all NFPA 805 transitions references the American Society of Mechanical Engineers (ASME) standard that includes fire PRA quality. Therefore, major changes to the fire PRA model regulatory guidelines are not expected.</p>
16	<p>C. <u>REGULATORY POSITION</u></p> <p>1. Nuclear Energy Institute Document NEI 04-02</p> <p><u>1.1 General</u></p> <p>Section 1.1, second paragraph, last sentence. Efforts should be undertaken to resolve difference between NEI 04-02, Rev. 2 and the position in the Regulatory Guide so that this last sentence can be deleted.</p>	<p>The staff disagrees that a change is needed and notes that an equivalent sentence is in the current revision of RG 1.205. The sentence is cautionary in nature, and specifies the appropriate hierarchy between the two documents: RG 1.205 and NEI 04-02.</p>
17	<p><u>1.2 Exceptions and Clarifications</u></p> <p>General – The NRC should cite specific sections of NEI 04-02</p>	<p>The staff intentionally did not reference specific sections and appendices of NEI 04-02. To do so would have implied that only the specific portions cited</p>

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	<p>corresponding to the exceptions. Many exceptions are general and leave it up to licensees and inspectors to determine the lack of endorsement.</p>	<p>were not endorsed. The staff did not want to imply in DG-1218 that the specific unendorsed text found during its review was the only such text in the NEI 04-02 document. The staff is working with NEI on revision 3 to NEI 04-02 that may remedy some of the identified exceptions. No change was made to DG-1218.</p>
	<p>b. If the NRC takes exception or needs to provide clarification for any examples in NEI 04-02, they should be provided in Regulatory Position C.1.2.</p>	<p>The staff does not agree with this comment. Examples only serve to enhance understanding of the underlying concepts or methods, and may not be applicable to any given licensee. The NRC typically does not endorse examples in regulatory guides; for example, see exception 2 in RG 1.201. No change was made to DG-1218.</p>
	<p>c. This statement is inappropriate. If the NRC needs to provide an exception or clarification in NEI 04-02, then this should be provided in Regulatory Position C.1.2.</p> <p>The discussion creates an opportunity for future re-interpretation of the regulatory requirements. The entire bullet item should be removed pending an interim updated to NEI 04-02 to reconcile the usage of 'should' and 'shall'.</p>	<p>The staff does not agree with the comment. Contrary to the commenter's assertion, this exception in DG-1218 is intended to ensure that the rule language of 10 CFR 50.48(c) is not modified by sub-tier guidance documents. No change was made to DG-1218.</p>
	<p>e. This statement is unnecessary [since] the transition process, which was endorsed by Regulatory Guide 1.205, Revision 0 requires that a licensee review their entire program.</p>	<p>The staff does not agree with this comment because it does not appear to address the intent of the clarification, which is to ensure that licensees do not assume that all aspects of their existing fire protection program automatically comply with NFPA 805 requirements. The comment is on the scope of review of a licensee's fire protection program (FPP). No change was made to DG-1218.</p>
	<p>f. Recommend that the statement be changed to reflect the wording in NFPA 805 [numbers added by NRC staff to facilitate resolution of the comment parts.]</p> <p>(1) "...While the NRC endorses this guidance, the additional risk presented by the use of recovery actions shall be evaluated when the use of recovery actions has</p>	<p>The response to each part of the comment follows:</p> <p>(f)(1) The staff agrees with this comment in that the guidance must be in accordance with the rule requirements contained in NFPA 805, Revision 1. DG-1218 Sections C.1.2.f and C.2.4 have been revised appropriately (refer also to NEI comment #38).</p>

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	<p><u>resulted in the use of the performance-based approach</u> per NFPA 805, Section 4.2.4 (see Regulatory Position 2.4).</p> <p>Note this position is a revision from the guidance in NEI 04-02 and Regulatory Guide 1.205 Revision 0</p> <p>(2) The exception made by DG-1218 is that NEI 04-02 requires that OMAs currently unallowed must be evaluated by the change process but the NRC position is that all recovery actions must be addressed by performance-based methods as required by NFPA 805 Section 4.2.4. While the statement is true, the intent is that unallowed OMAs must be evaluated by the change process but other recovery actions may be evaluated with other options provided in NFPA 805. Suggest rewording this exception to allow all the performance based options under NFPA 805.</p> <p>(3) In addition, the use of the phrase "all recovery actions must be addressed" may be in conflict with NFPA 805. This appears to be an expansion of applicability beyond what is discussed in NFPA 805. A change of intent of applicability of statements in NFPA 805 would require Rulemaking. NFPA 805 section 4.2.3.1 indicates that the definition of "Recovery Actions" is limited to those actions necessary to maintain a success path free of fire damage.</p> <p><i>"Use of recovery actions to demonstrate availability of a success path for the nuclear safety performance criteria automatically shall imply use of the performance-based approach as outlined in 4.2.4."</i></p>	<p>(f)(2) The staff agrees with this comment in that recovery actions previously approved and documented in an SER do not need to be included in the plant change evaluation. DG-1218 Sections C.1.2.f and C.2.4 have been revised appropriately.</p> <p>(f)(3) The statement that NFPA 805, Section 4.2.3.1, indicates that the definition of "Recovery Actions" is limited to those actions necessary to maintain a success path free of fire damage is incorrect. Instead, the interaction between 4.2.3.1 and 4.2.4 states that if a recovery action is used to demonstrate the availability of a success path, the additional risk presented by its use shall be evaluated. That interaction does not change the definition of recovery action but does limit the additional risk evaluation to the defined subset of recovery actions. The staff agrees that DG-1218 did not properly note the qualifying words in NFPA 805, Section 4.2.3.1; DG-1218 Sections C.1.2.f and C.2.4 were revised appropriately.</p>
	<p>h. Need explicit reference for lack of endorsement.</p>	<p>The staff does not endorse this list because the plant-specific license condition and Section C.3.2.4 of DG-1218 identify the types of changes that can be self-approved. No change to DG-1218 was made.</p>
	<p>i. The NRC changed the license condition without input from the industry.</p>	<p>The staff agrees with this comment, insofar as the new sample license condition wording proposed in DG-1218 was developed by the staff. The staff</p>

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		is proposing changes to the sample license condition, in part, to address issues raised by industry. Specifically, the staff intends to incorporate the resolution to FAQ-06-0008, an issue raised by industry, into the license condition. Also, the staff responded to industry concerns expressed at a public meeting on October 3, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML083090074), by (1) proposing a method for licensees to employ self-approval methods approved subsequent to their license amendment; and, (2) removing the problematic 90-day period for the staff to determine whether a formal license amendment request would be required. DG-1218 was not modified as a result of this comment.
	<p>k. [The NRC does not endorse the fire model V&V standard referenced in NEI 04-02.]</p> <p>This statement is not clear on the purpose of the lack of endorsement and was not explained satisfactory by NRC staff at the 4/29/09 meeting on this topic.</p>	The staff agrees with the comment. The exception text was deleted.
	n. This appears to implement a standard in SER development that did not exist at the time the NRC approval was granted. NEI 04-02 provides a legitimate approach to determining prior approval. These statements would be included in NEI 04-02 B-1 Table for the NRC's concurrence.	The staff does not agree that the referenced part of NEI 04-02 provides a complete and acceptable approach to determining prior approval; hence the clarification in DG-1218. The staff notes that the current RG 1.205, Section C.2.4, includes this exception, so there is no change in position. No change to DG-1218 was made.
	<p>o. The discussion includes a statement that can be interpreted to mean that the required information submittal includes the entire plant PRA and Fire PRA models and all related documentation. This interpretation would be inconsistent with current practice for risk-informed applications. Instead, it is suggested that the wording be modified as follows:</p> <p style="padding-left: 40px;">The licensee should ensure that it submits sufficient information for the NRC to make its safety finding on the</p>	The staff agrees with the commenter that the change proposed by the commenter more properly reflects the staff's guidance and precedents describing what PRA information should be submitted. DG-1218 was changed to incorporate this comment.

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	<p>application.</p> <p>The suggested wording change is consistent with wording in Section 2.2.2 and 2.2.3.</p> <p>This section takes exception to NEI 04-02 Section 4.6.1 since the list may be incomplete. However, only one example is provided and regulatory position 2.2 does not provide any additional guidance. When an exception is taken to NEI 04-02 the staff’s position should be clearly stated such that a licensee has sufficient guidance to ensure compliance. This exception and the guidance in regulatory position 2.2 are vague and will lead to interpretations by individual licensees and potential rejection by the staff.</p>	
18	<p>2. License Transition Process</p> <p>2.1 <u>Transition Schedule</u></p> <p>Will the NRC be providing information on how the review will be conducted such as the timing and order they will be performed? Based on the number submittals and NRC resources. Some plants could see 3 years before there LAR is approved.</p> <p>This section discusses an implementation schedule. One aspect is a schedule that is consistent with the enforcement discretion policy. However, the enforcement discretion policy is not concerned with the time it takes to implement the NFPA 805 program but the time limit is defined with respect to the issuance of the license amendment request. Suggest the sentence with regard to enforcement discretion be deleted unless the staff wishes to provide additional guidance in this area.</p>	<p>The reference to the Commission’s interim enforcement discretion policy is in the current RG 1.205. Other references to that policy have been removed from DG-1218, except in clarification C.1.2.p, because the policy may change and the latest information is available on the NRC public website. No change to DG-1218 was made.</p>
21	<p>2.2.3 Risk-Informed or Performance-Based Alternatives to Compliance with NFPA 805</p> <p>Section 2.2.3, first paragraph, first sentence: The wording as</p>	<p>The comment appears to suggest that the regulatory guide can modify the rule language, which is not correct. The paragraph in DG-1218 accurately reflects the intent and wording of 10 CFR 50.48(c). DG-1218 was not changed.</p>

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	<p>stated could cause the unintended re-interpretation of the requirements of the Regulation. To avoid this potential, the following wording change is recommended:</p> <p>Under 10 CFR 50.48(c)(4), a licensee may request NRC approval (by license amendment) of the use of alternative risk-informed or performance-based methods (i.e., methods that differ from those prescribed by NFPA 805 as clarified or otherwise stipulated in this Regulatory Guide) to demonstrate compliance with 10 CFR 50.48(c).</p>	
22	<p>Recommend not limiting the alternative methods to “topical reports”. The process should allow the FAQ/NEI 04-02 process and endorsement in subsequent revisions to Regulatory Guide 1.205 Revision 0 as an acceptable process.</p> <p>The draft revision Regulatory Guide appears to call for the use of NRC-approved methods, or methods based on topical reports previously approved by the NRC, whereas the current revision allows a licensee to request NRC approval of the method via the license amendment. Additionally, the current revision specifies that “methods” means NFPA 805, while the draft revision could be interpreted to refer to NUREG 6850 and thus require the use of that methodology or another methodology from an NRC-approved topical report.</p>	<p>The staff agrees with the comment. The word “topical” appears twice in DG-1218; in both cases, the wording has been changed to be more generic and use “topical report” as an example. Note that NUREG/CR-6850 is not referred to in this section; it is only mentioned in DG-1218, section C.4.3. DG-1218 Sections C.2.2.3 and C.4.2 were revised to not limit the alternative to “topical reports.”</p>
24	<p>Recommend changing to</p> <p>“Licensee self-approval of FPP changes using approved performance-based methods that are alternatives to NFPA 805 may be granted in the fire protection license condition when appropriate. Subsequent changes to the approved performance-based methodology that is an alternative to NFPA 805 must be submitted for NRC review and approval (through a license amendment request) before being applied</p>	<p>DG-1218 has been revised to clarify that risk-informed, performance-based alternatives to NFPA 805 are what is being discussed in Regulatory Position 2.2.3.</p>

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	to the licensee’s FPP.”	
25	<p>2.2.4 Risk Evaluations</p> <p>Comment 1 - The current revision does not indicate that the licensee would be expected to submit detailed risk analyses as part of their LAR. Regulatory Guide 1.200, R2 was supposed to reduce the extent of information that the licensee was expected to submit for NRC review.</p> <p>Recommend following changes for clarification:</p> <p style="padding-left: 20px;">“The license amendment request should clearly demonstrate that the requirements of 10 CFR 50.48(c) and NFPA 805 will be met once transition is complete. This includes providing analyses and results of any required risk assessments. The use of the NFPA 805, Section 4.2.4.2, fire risk evaluation requires comparing the difference in risk between the deterministic requirements of NFPA 805, Section 4.2.3, and the proposed alternative. If the use of recovery actions has led to the performance-based approach, the additional risk presented by their use must be evaluated in accordance with NFPA 805, Section 4.2.4. This risk evaluation should use fire modeling or other engineering analyses (e.g., NFPA 805, Section 4.2.4.1) or fire risk evaluation probabilistic methods (e.g., NFPA 805, Section 4.2.4.2). A bounding approach may be acceptable. Any risk increases may be combined with risk decreases when estimating the total risk change to be reported in the license amendment request, as described in Regulatory Position 3.2.5.”</p> <p><u>Note that the deterministic approach in Section 4.2.3 of NFPA 805 includes the “pre-transition fire protection licensing basis, as depicted in Figure 2-2 of NFPA 805.</u></p> <p>Comment 2 - This section states that the change is risk is the difference between the post-transition plant configuration and</p>	<p>Comment 1: The staff agrees that the change from “probabilistic” to “fire risk evaluation” matches the language in NFPA 805 and improves the clarity of the discussion and has made this change. The staff disagrees that the deterministic approach in Section 4.2.3 of NFPA 805 automatically includes the pre transition fire protection licensing basis. NFPA 805, Figure 2.2, includes the “existing plant license basis” as part of the deterministic approach; however, the next step (“Deterministic Basis” - step 2.2(f) in the text) is to verify that the deterministic requirements of Chapter 4 are met. Section 2.2.7 of NFPA 805 allows engineering equivalency evaluations to be used to meet the deterministic requirements in Chapter 4 of NFPA 805 if an equivalent level of fire protection is demonstrated, but this provision does not extend to recovery actions, because NFPA 805, Section 4.2.3.1, states that certain recovery actions require use of the performance based approach of Section 4.2.4. This requirement applies whether or not the recovery action is part of the plant’s existing licensing basis. The staff notes that NEI agrees that this is a requirement of NFPA 805, as documented in comments #17f, 25, 35, and 38.</p> <p>Comment 2: DG-1218 addresses both the plant change evaluation process, which is what is referred to under NFPA 805, Sections 2.2.9 and 2.4.4, as well as the fire risk evaluation process described in Section 4.2.4.2. Although a given condition may be acceptable under the existing deterministic rules (e.g., 10 CFR 50 Appendix R or NUREG 0800) it may still need to be analyzed or evaluated under the NFPA 805 process. The staff agrees that a <u>plant change evaluation</u> is not required for previously compliant conditions, but that does not mean that the previously compliant condition meets NFPA 805 Section 4.2.3. As part of the transition, licensees are required to perform analyses as necessary to demonstrate the ability to achieve the nuclear safety performance criteria and other calculations required by NFPA 805. The referenced text was added to DG-1218 based on experience acquired during the pilot process indicating that additional guidance was needed to clarify staff expectations of the information required to support a staff conclusion that the rule’s requirements have been met and thereby simplify the review of future license amendment requests.</p>

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	<p>the NFPA 805, Section 4.2.3 deterministically compliant configuration. This is a major change in staff position from Regulatory Guide 1.205 Revision 0. Regulatory Guide 1.205 in regulatory position C.2.2 states “The total risk increase associated with all FPP noncompliances (based on current deterministic FPP regulations) that the licensee does not intend to bring into compliance and the total risk change associated with plant changes planned for the transition to NFPA 805 should be estimated and reported in the license amendment request.” This directly conflict the statement in DG-1218 C.2.2.4 that discusses the change in risk with the NFPA 804 Section 4.2.3 compliance. NFPA 805 Section 2.2.9 describes a plant change evaluation as a change to a previously approved FPP element. NFPA 805 Section 2.4.4 states “A plant change evaluation shall be performed to ensure that a change to a program element is acceptable.” Both sections reference “a previously approve fire protection program element” therefore, the previously approved fire protection program element is based on current FPP regulations as modified by currently approved exemptions and deviations and not NFPA 805 Section 4.2.3. A current noncompliance is against the current FPP regulations and not NFPA 805. Issues that comply with current FPP regulations as modified by approved exemptions and deviations are not considered a change and do not require a change evaluation or reporting of the risk increase due to a change.</p> <p>Comment 3 - The current wording creates confusion as to whether the additional risk to be evaluated for Recovery Actions need be considered in a manner that would otherwise be required for Change Evaluations and the associated acceptance criteria. The source of confusion revolves around the use of the term ‘change in risk’ as it is used in the context of Change Evaluations and Recovery Actions. To avoid this potential source of confusion, the following wording changes are</p>	<p>Comment 3: As stated in the response to part 2 of the comment, the staff agrees that previously approved elements of a licensee’s fire FPP need not be part of the plant change evaluation, since they are not changes to a previously approved FPP. The staff has substantially re-written Regulatory Position 2.2.4 of the guidance to clarify the staff position regarding the risk evaluations associated with plant change evaluations and with the fire risk evaluation performance-based method of NFPA 805, Section 4.2.4.2. In accordance with NFPA 805 Section 4.2.3.1, certain recovery actions will require a performance-based assessment for demonstrating compliance with NFPA 805, regardless of prior approval. The additional risk of these recovery actions, compared to the NFPA 805 deterministic criteria, must be determined for compliance with the regulation and reported in the license amendment request. For previously-approved recovery actions, the staff will consider the additional risk to be acceptable based on the previous approval. Although the additional risk of previously-approved recovery actions themselves is deemed acceptable because of prior approval, that additional risk must be factored into the staff determination of the acceptability of any new (non-previously approved) recovery actions and variances from deterministic requirements (VFDRs) that are evaluated using the fire risk evaluation method. This is done by summing the additional risk of all recovery actions, whether or not previously approved, and the additional risk of the VFDRs, and comparing that change in risk to the acceptance guidelines of RG 1.174. Regulatory Position 2.2.4 has been revised to describe this concept.</p>

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recommended:	<p>The license amendment request should clearly demonstrate that the requirements of 10 CFR 50.48(c) and NFPA 805 will be met once transition is complete. This includes providing analyses and results of any required risk assessments. The use of the NFPA 805, Section 4.2.4.2, fire risk evaluation requires comparing the difference in risk between the deterministic requirements of NFPA 805, Section 4.2.3, and the proposed alternative. If the use of recovery actions has led to the performance-based approach, the additional risk presented by their use must be evaluated in accordance with NFPA 805, Section 4.2.4. <u>However, such evaluations are not Change Evaluations that would otherwise be required by NFPA 805, Section 2.4.4.</u> The risk evaluation should use fire modeling or other engineering analyses (e.g., NFPA 805, Section 4.2.4.1) or probabilistic methods (e.g., NFPA 805, Section 4.2.4.2). A bounding approach may be acceptable. <u>When performed in support of Change Evaluations,</u> any risk increases may be combined with risk decreases when estimating the total risk change to be reported in the license amendment request, as described in Regulatory Position 3.2.5.</p>	
	<p>The change in risk (both in terms of core damage frequency (CDF) and large early release frequency (LERF)) <u>associated with Change Evaluations required by NFPA 805, Section 2.4.4</u> should be determined and provided individually for each fire area and collectively for all fire areas that do not meet the deterministic requirements of NFPA 805, <u>as clarified by the provisions described in Section 2.3 of this Regulatory Guide,</u> and for which a quantitative risk-informed, performance-based approach is applied using NFPA 805, Section 4.2.4.2. The change in risk should be the difference between the post-transition plant configuration</p>	

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	<p>and the NFPA 805, Section 4.2.3, deterministically compliant configuration <u>as clarified by the provisions of Section 2.3 of this Regulatory Guide.</u></p> <p>The total change in risk <u>arising from the NFPA 805, Section 2.4.4 required Change Evaluations</u> associated with the implementation of NFPA 805 should be consistent with the acceptance guidelines in Regulatory Guide 1.174, “An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis,” issued November 2004 (Ref. 13). The quality of the risk assessments should be consistent with Regulatory Position 4.3.</p>	
26	<p>Recommend adding the following clarification:</p> <p><u>Note that the deterministic approach in Section 4.2.3 of NFPA 805 includes the “pre-transition fire protection licensing basis, as depicted in Figure 2-2 of NFPA 805.</u></p> <p>The current revision of the Regulatory Guide does not discuss determination of change in risk for each fire area individually and collectively.</p>	<p>The staff disagrees with the proposed clarification. See the staff’s response to similar wording in part 1 of comment #25.</p> <p>The staff agrees that the current RG 1.205 does not discuss the determination of change in risk for each fire area. This text was added based on experience acquired during the pilot process indicating that additional guidance was needed to clarify staff expectations of the information required to support a staff conclusion that the rule’s requirements have been met and thereby simplify the review of future license amendment requests (LARs). The additional guidance is based on direction in Section 2.2.3 of NFPA 805 that directs that “an analysis shall be performed on a fire area basis.”</p>
27	<p>[The total change in risk associated with the implementation of NFPA 805 should be consistent with the acceptance guidelines in Regulatory Guide 1.174 ...]</p> <p>Recommend removing this acceptance criterion since it is not a requirement of NFPA 805 and may place unnecessary complications with the transition process.</p>	<p>This sentence has not changed from the existing RG 1.205, Regulatory Position 2.2. NFPA 805 Section 2.4.4.1 requires that the change in risk (from 2.4.4 and 4.2.4) associated with implementation of the performance-based risk-informed option in NFPA 805 be acceptable to the AHJ. Regulatory Position 2.2.4 in DG-1218 was substantially re-written in response to Comment #25 to clarify that the additional risk of previously-approved recovery actions is deemed acceptable based on the prior approval, but that their additional risk influences the acceptability of other recovery actions and VFDRs for which the</p>

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		fire risk evaluation approach is used; refer to the response to NEI comment #25.
30	<p>2.2.6 Radioactive Release Transition</p> <p>This statement should be revised to reflect FAQ 56 resolution.</p>	<p>FAQ 56 is currently unresolved. The DG-1218 text represents the current staff position. When the FAQ is resolved, this section of the RG 1.205 will be revised to reflect any changes, or the section of NEI 04-02 containing the consensus position will be endorsed. No change was made to DG-1218 for this revision.</p>
32	<p>2.3.1 Previously NRC-Approved Alternatives to NFPA 805, Chapter 3, Fundamental Fire Protection Program and Design Elements</p> <p>The term “exemption” is not an appropriate reference since most plants do not have “exemptions” from topics now addressed by NFPA 805 Chapter 3.</p> <p>This section implies that prior NRC approval is only via an exemption. This is not correct. The exemption process was heavily used as part of the compliance effort for 10 CFR 50 Appendix R. However, the NRC staff approved many unique fire protection program elements prior to Appendix R with just the SER process. Suggest that this section be changed to acknowledge that FPP elements could have been previously approved via a SER. In addition, there are some approvals in a SER that should have been approved exemption but were never processed as an exemption. The staff has stated that they would approve such exemption requests provided they are still valid. However, for a plant transitioning to NFPA 805 this would appear to be an unnecessary step.</p>	<p>DG-1218 has been modified to add back in text from RG 1.205 regarding prior approval. Reference to “exemptions” has been expanded to include “deviations²” as well. The intent of the guidance is to clarify that prior approval can be demonstrated from safety evaluation reports as related to plant-specific licensing actions. The staff does not agree that an SER, by itself, constitutes prior approval.</p>

² The term “deviation” is used in this document to refer to NRC approved fire protection program elements that deviate from the guidance in NUREG-0800 for plants licensed to operate after 1979.

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33	The term “exemption” is not an appropriate reference since most plants do not have “exemptions” from topics now addressed by NFPA 805 Chapter 3.	See resolution to comment #32.
35	<p>2.3.2 Previously NRC-Approved Alternatives to NFPA 805, Section 4.2.3, Deterministic Requirements</p> <p>(Letters added by NRC staff to facilitate resolution.)</p> <p>a) Clarification should be provided that a change evaluation is not necessary if a recovery action is addressed by an exemption.</p> <p>b) This section does not address post-1979 plants which do not have exemptions from Appendix R requirements.</p> <p>c) This paragraph allows the use of approved exemptions to meet chapter 4 requirements except if it involves a recovery action as defined in NFPA 805 Section 1.6.52. However, having an existing exemption would indicate compliance with the current FPP regulation and therefore this recovery action does not represent a change that would have to be evaluated via the change process. The risk of such an action would still have to be evaluated. In addition, chapter 4 of NFPA 805 narrows the definition of a recovery action with respect to deterministic compliance (Section 4.2.3). Section 4.2.3.1 states that one success path be free from fire damage without the use of recovery actions. Therefore, actions that do not involve the credited success path do not invalidate the deterministic approach as defined by NFPA 805. Previously R. G. 1.205 stated that “Operator manual actions credited for protection of redundant trains, in lieu of Appendix R III.G.2 protection, do not meet deterministic requirements in chapter 4 of NFPA 805. Consequently, unless specifically approved by the NRC, these operator manual actions should be addressed as plant</p>	<p>Response to the comments follows:</p> <p>a) The staff agrees that, by definition, elements of the plant’s current fire protection licensing basis that carry over to NFPA 805 are not plant changes as defined NFPA 805 sections 2.2.9 and 2.4.4. However, this should not be confused with the additional requirement to use performance-based methods (fire modeling – Section 4.2.4.1; fire risk – Section 4.2.4.2) for certain recovery actions, whether or not previously approved. Although this comment was to DG-1218 Section C.2.3.2, the staff added clarification that a plant change evaluation is not necessary for previously approved recovery actions in Regulatory Position 2.3.</p> <p>b) DG-1218 was revised to include deviations when discussing exemptions (exemptions/deviations) as necessary.</p> <p>c) See the staff response to part a) of the comment and the response to comment 25. Changes were made to clarify that only recovery actions credited for protection of redundant trains need be included in the Section 4.2.4 evaluation.</p>

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	changes.” This concept from R. G. 1.205 should be incorporated into DG-1218.	
36	<p>[The NRC’s approval of the licensee’s request to implement an FPP based on NFPA 805 should reference the valid exemption ...]</p> <p>This section does not address post-1979 plants which do not have exemptions from Appendix R requirements.</p>	See resolution of comment #32.
37	<p>Recommend changes:</p> <ul style="list-style-type: none"> a. The EEEE demonstrates an equivalent level of fire protection compared to the deterministic requirements in NFPA 805, Chapter 4. b. The EEEE is not based solely on risk-informed on deterministic and not performance-based methods. c. The EEEE does not include any recovery actions as defined in NFPA 805, Section 4.6.52. <p>The bulleted list provides acceptance of EEEEs. This differs from Regulatory Guide 1.205. DG-1218 states that the EEEE must be deterministic and not performance based while Regulatory Guide 1.205 states that the EEE must be deterministic and not based on risk calculation. Regulatory Guide 1.205 is correct. The determination of equivalency is a performance based type of analysis (e.g. the existing FPP feature performs equivalent to the compliant FPP feature). It is acknowledged that the use of risk is not permitted. Suggest adopting the words from Regulatory Guide 1.205</p>	<p>The staff agrees to the comment on item b of NEI’s proposed changes, and DG-1218 has been changed to more closely agree with the original RG 1.205 text.</p> <p>The staff does not agree with deleting item c. However, the staff has changed the reference in item c from NFPA 805, Section 1.6.52 to Section 4.2.3.1. Section 4.2.3.1 identifies the sub-set of recovery actions on which reliance implies the use of the performance based, as opposed to the deterministic existing engineering equivalency evaluations (EEEEEs), approach. RG 1.205 included the following sentence: “With the exception of evaluations of certain recovery actions and any deviations from NFPA 805 requirements, a GL 86-10 evaluation showing no adverse effect on safe shutdown and permitted under the licensee’s current licensing basis is one acceptable means of meeting the NFPA 805 EEEE [existing engineering equivalency evaluation] acceptance criterion of ‘an equivalent level of fire protection compared to the deterministic requirements.’” DG-1218 item c does not change the position described in RG 1.205 but simply defined the “certain recovery actions” that can not be deemed equivalent in the EEEEEs. This definition clarifies that the recovery actions of interest are those called out in NFPA 805 Section 4.2.3.1.</p>
38	<p><u>2.4 Recovery Actions</u></p> <p>Recommended changes (comments lettered by NRC staff to</p>	a) The staff interprets the proposal to change “required” to “implied” to be based on the phrase in NFPA 805 Section 4.2.3.1, that the “[u]se of recovery actions . . . shall imply use of the performance-based approach as outlined in 4.2.4.” The staff has concluded that the phrase “imply” in NFPA 805 is used

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	<p>facilitate resolution):</p> <p>a) Recovery actions as defined in NFPA 805, Section 1.6.52, do not meet the deterministic requirements in Section 4.2.3 of NFPA 805. Consequently, the licensee must address recovery actions, whether or not previously approved by the NRC, using the performance-based methods in Section 4.2.4, as implied required by NFPA 805, Section 4.2.3.1, and must evaluate the additional risk presented by of their use according to NFPA 805, Section 4.2.4.</p> <p>b) Section 2.4, first paragraph: the requirements for risk evaluations and risk increases can cause future confusions as to the specific extent of the requirements. The following wording change is recommended to avoid such potential future confusion:</p> <p style="padding-left: 40px;">Recovery actions as defined in NFPA 805, Section 1.6.52, do not meet the deterministic requirements in Section 4.2.3 of NFPA 805. Consequently, the licensee must address recovery actions, whether or not previously approved by the NRC, using the performance-based methods in Section 4.2.4, as required by NFPA 805, Section 4.2.3.1, and must evaluate the additional risk of their use according to NFPA 805, Section 4.2.4. However, such evaluations are not Change Evaluations that would otherwise be required to meet NFPA 805, Section 2.4.4 and any quantified risk need not be aggregated with other results arising from Change Evaluations.</p> <p>c) The statements in the DG appear to be based a very idealized interpretation of how Appendix R was implemented. This "interpretation" ("opinion" really) is not supported by actual plant design, or Licensing history regarding Appendix R compliance.</p> <p>The statements appear to reflect a preference that it is possible</p>	<p>in the sense of suggesting by logical necessity. Therefore, DG-1218 accurately describes the requirements of NFPA 805. DG-1218 was not changed.</p> <p>b) The staff agrees that a plant change evaluation that focuses solely on a previously approved recovery action is not required. As discussed in the response to NEI comment #25, the additional risk of certain recovery actions, whether or not previously approved, must be evaluated using performance based methods. DG-1218 Regulatory Position 2.3 was modified to clarify that plant change evaluations do not need to independently justify fire protection elements that do not change. No change was made to Regulatory Position 2.4 to address this part of the comment.</p> <p>c) The staff does not agree with the commenter's characterization that the staff is requiring a change in risk estimate between an ideal and an actual design. The change in risk calculation is between what the licensee would be required to implement if there was no risk-informed alternative, and what the licensee is proposing to implement. The staff has responded, in part, to one source of the commenter's concern by proposing a definition of "primary control station" that recognizes dedicated or certain alternative shutdown panels as "primary control stations." Further, in response to part e) of the comment, DG-1218 was modified to properly reflect the scope of recovery actions in NFPA 805, Section 4.2.3.1.</p> <p>d) Compliance with the regulations carries the presumption of adequate protection of public health and safety. Licensees that chose to implement alternative regulatory requirements (e.g., 10 CFR 50.48(c)) must implement all the requirements in the alternative regulation. In most instances, risk-informed alternatives provide increased flexibility by utilizing risk estimates to support decisions that appropriately reflect the safety profile of a facility. In some instances, these decisions may include modifying the existing facility in response to these risk estimates. As stated in c) above, the definition of "primary control station" was developed to minimize the impact of transition to NFPA 805 on a licensee's use of a dedicated or alternative shutdown capability. Neither the rule nor DG-1218 requires a licensee to discontinue or change a previously approved recovery action based on the additional risk of that action. Section 2.2.4 of DG-1218 was substantially re-written as a result of</p>

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	<p>to construct an "ideal" Remote Shutdown capability that provides a train free of fire damage and ALSO intercepts all non-credited circuits on the other trains that could cause inadvertent actuations that could complicate the shutdown. There is no way to construct such a Remote Shutdown panel without making the safe shutdown provisions for a fire at the RSP from being as complex (or more complex) than the Main Control Room.</p> <p>d) In the spirit of "safe today, safe tomorrow", it would seem that every site's pre-existing remote/alternative shutdown capability "is what it is", and was required to be approved by the NRC as part of the licensing of the "Dedicated/Alternative" provisions in the existing licensing basis.</p> <p>This seems like all it is doing is penalizing plants for complying with Appendix R.</p> <p>e) This section describes the definition of recovery actions per NFPA 805 Section 1.6.52. However, it ignores the qualification provided by NFPA 805 Section 4.2.3.1. Section 4.2.3.1 states that one success path be free from fire damage without the use of recovery actions. Therefore, actions that do not involve the credited success path do not invalidate the deterministic approach as defined by NFPA 805. This section then attempts to describe alternate shutdown areas and the requirements. Alternate shutdown areas were typically approved by the staff during the original Appendix R compliance efforts. Therefore, they constitute prior NRC approval and are compliant with the current FPP regulations. Based on this they are not considered a change and the risk associated with these areas does not have to be reported as part of the change in risk for the transition to NFPA 805. It is acknowledged that the risk of any recovery actions has to be evaluated.</p>	<p>this and similar comments to address the additional risk of previously-approved recovery actions.</p> <p>e) The staff agrees that the DG ignored the qualification provided by NFPA 805 Section 4.2.3.1 and therefore did not appropriately reflect the NFPA 805 requirements described in Sections 4.2.3 and 4.2.4 that specify which recovery actions need an evaluation of the additional risk presented by their use. The staff has revised DG-1218, Regulatory Position 2.4, to accurately reflect the rule language in NFPA 805 Section 4.2.3.1.</p>
40	[For components that have controls in the main control room, operation of that component from any other location would be	FAQ 30 is currently unresolved. The DG-1218 text represents the current staff position. When the FAQ is resolved, this section of the RG 1.205 will be

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	<p>considered a recovery action if such operation were needed to achieve the nuclear safety performance criteria. ...]</p> <p>There needs to be an endorsement of the FAQ 07-0030 process for determining the scope of recovery actions.</p>	<p>revised to reflect any changes, or the section of NEI 04-02 containing the consensus position will be endorsed.</p>
41, 42, 43	<p>[Therefore, the following applies to primary control stations:]</p> <p>The benefit of providing these explicit criteria is not evident. There are a number of different configurations at nuclear plants and the benefits of performing an extensive categorization based on these criteria are not understood, given that characterization of fire risk is actually performed at a broader level in “state of the art” Fire PRAs.</p>	<p>The benefit of the explicit criteria is that licensees that have installed systems or components specifically to meet the “dedicated shutdown” option of Appendix R, Section III.G.3, of 10 CFR 50, or that utilize “alternative shutdown” options that meet criteria set forth in DG-1218, do not have to consider operation of such systems or components as “recovery actions” under NFPA 805 when command and control is shifted from the main control room. No change to this part of DG-1218 was necessary to address this comment.</p>
45	<p><u>3.1 Standard License Condition</u></p> <p>(Letters added by NRC staff to facilitate resolution.)</p> <p>a) Once the language of this standard license condition are agreed upon, are all transition plants required to use this wording going forward?</p> <p>b) It is stated that the risk assessment approach, methods, and data shall be appropriate for the nature and scope of the change being evaluated. Further clarification or guidance is needed on the definition of "methods", "data", and "appropriate". Previously approved methods (no mention of the embedded or implied data or assumptions or sources of uncertainties) only was mentioned with respect to no need for prior NRC approval. Given the evolving nature of the methods, clarification of what constitutes NRC approval of generic methods for use in NFPA 805 risk assessments is essential. Are methods used by the pilot plants and other non-pilot plants which receive SERs considered as previously approved methods and can be used without prior NRC approval?</p> <p>c) This license condition differs from that originally proposed by</p>	<p>a) The license condition provided in DG-1218 is a sample. No change to DG-1218 is required. Note that the staff intends to use the sample provided but an applicant may request and justify alternative language.</p> <p>b) The staff agrees that further clarification about which “methods” require approval by the staff and how such approval would be sought and granted are required. Changes to clarify this issue have been made to Regulatory Positions 3.1, 3.2.4, and 4.3.</p> <p>c) The staff agrees that this is a new position that would bar self approval as described by NEI. It was added to DG 1218 based on staff discussions related to ensuring that NFPA 805 requirements that the PRA used reflect the current design and operation of the plant. The staff modified the example license condition to allow self approval during the period between the effective date of the new license and full implementation of changes to the FPP that are risk neutral or risk decreases, or that are performance-based changes to the NFPA 805 Chapter 3 requirements included in the license condition.</p>

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	<p>Regulatory Guide 1.205. The key difference is the transition license conditions. Transition condition 1 would bar all FPP changes until full compliance is achieved. By transition condition 2 this is implied when all modifications are complete. This sets up a condition where even risk beneficial modifications cannot be implemented. In addition, even the modification required for compliance may be in this situation if they were not evaluated and approved under the old license condition. Once a LAR is approved, the programmatic aspects of the NFPA 805 will be implemented in the agreed upon schedule but modification may not be complete. Transition condition 3 ensures plant safety by maintaining appropriate compensatory measures. There will also be a list of changes evaluated under the old license condition that occurred in the time from the LAR submittal to the time of approval that will have to be evaluated by the new license condition. The transition condition 1 would prevent that effort and lead to a program that does not meet the as-built, as operated plant. Transition condition 1 should be deleted.</p>	
46	<p>A number of cross references were added to the Regulatory Guide 1.205 Rev. 0 license condition,</p> <p>“and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval”</p> <p>These statements appear “open ended”. Other processes for license amendment requests should be “stand alone” and not require cross reference within a 10 CFR 50.48(c) license condition.</p>	<p>The intent of the added text is to caution licensees that the fire protection program license condition is not intended to supersede other regulations that may apply in a given situation; e.g., 10 CFR 50.59. Note that Section 5.3.1 of NEI 04-02 contains similar admonitions. No change to DG-1218 was made.</p>
47	<p><u>Risk-Informed Changes that May Be Made Without Prior NRC Approval (sample license condition)</u></p> <p>The risk assessment of the change will use methods previously approved by the NRC. Previously approved methods may</p>	<p>The staff agrees that further clarification about which “methods” require approval by the staff and how such approval would be sought and granted is required. See the staff response and changes to DG-1218 related to comments 1 and 75.</p>

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	<p>include plant-specific NRC approval through a license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, where the NRC’s generic approval clearly states that the method may be applied without a plant-specific license amendment being granted.</p> <p>The current revision, however, only specified that the fire PRA should be acceptable according to a peer review performed against a standard endorsed by the NRC. As the NRC recently endorsed the combined ASME/ANS PRA Standard, which includes criteria regarding the technical adequacy of a fire PRA, a peer review performed using this standard would be considered sufficient under the current form of the RG. It is possible for a licensee to satisfy the criteria that the fire PRA be acceptable according to a peer review using this standard, even without using specific methods approved by the NRC. The current language should remain in the next revision of the RG.</p> <p>Section b. Since the NRC is pushing for more of a bounding FPRA, the criteria should be an order of magnitude higher to accommodate mandated conservatism in the fire PRA.</p>	<p>Regarding section (b), the staff disagrees with the assertion that the NRC is pushing for a bounding PRA. Therefore, this is not a basis for increasing the self-approval criteria an order of magnitude.</p>
48	<p><u>Transition License Conditions (sample license condition)</u></p> <p>Recommend the following changes:</p> <p>(1) Before implementation of the NFPA 805 Chapter 2 methodology achieving full compliance with 10 CFR 50.48(c), the licensee’s fire protection program may not be modified as allowed above.</p> <p>(2) The licensee shall implement the following modifications to its facility to complete implementation of the NFPA 805 Chapter 2 methodology transition to full compliance with 10 CFR 50.48(c) by {date}: {Include a plant-specific list of any modifications identified by the licensee as necessary to</p>	<p>The staff does not agree with the comment. The two paragraphs are intended to refer to the point in time when full compliance with 10 CFR 50.48(c) is achieved, not implementation of the NFPA 805 Chapter 2 methodology. However, item (1) was modified as a result of comment #45 to not preclude self-approval of certain changes in the period between the effective date of the license amendment granting the NFPA 805 fire protection licensing basis and full implementation. The revised wording would allow non-risk-informed changes per the plant’s license condition and risk-informed changes where the change is clearly risk neutral or a risk decrease.</p>

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	complete transition to its new fire protection license basis.) (3) The licensee shall maintain appropriate compensatory measures in place until completion of the modifications delineated above.	
49	<p>3.2 NFPA 805 Plant Change Evaluation Process</p> <p>3.2.1 Definition of a Change</p> <p>Item b, programmatic change includes assumption or analysis that affects the FPP. Clarification is required to bound the assumption in various PRA tasks. In addition, a threshold (qualitative or quantitative) for or clarification of what "affects the FPP" should be provided to make the definition of a change practically unambiguous or less unwieldy.</p>	<p>The staff notes that paragraph "b" is in the current RG 1.205, and is therefore not new guidance in DG-1218. Also, NEI 04-02, Section 5.3.3, includes preliminary risk screening for changes. As such, no change to DG-1218 was made as a result of this comment. Note the NFPA 805 requirement is to perform a plant change evaluation for any change to a previously approved FPP element.</p>
54	<p>3.2.2 Plant Change Evaluations</p> <p>[Nuclear safety defense in depth is achieved ...]</p> <p>Items a, b, c, d, e, and f</p> <p>It appears that these considerations may make a PRA or risk evaluation superfluous. If a change can meet all these requirements, doing a risk evaluation seems to be an academic exercise, because such an exercise will most likely result in risk numbers so small to the point below the level of resolution of the fire PRA state-of-the-art.</p>	<p>The staff does not agree that the discussion of nuclear safety defense in depth is tantamount to a fire PRA or that a fire PRA would be superfluous. However, DG-1218 was revised to (1) reference NFPA 805, Section 2.4.4.2, which requires both fire protection and nuclear safety defense-in-depth to be considered, and (2) to remove the list of nuclear safety defense-in-depth attributes and, instead, reference the guidance in RG 1.174.</p>
55	<p>3.2.3 NRC Approval of Fire Protection Program Changes</p> <p>Recommend the following changes:</p> <p>b. changes that rely on performance-based methods in meeting the fundamental FPP elements and design requirements of Chapter 3 of NFPA 805, and that are not previously approved alternatives allowed by Section 3.1 of</p>	<p>The staff agrees with the intent of this comment. Item b on the list was revised to make it clear that performance-based methods used for NFPA 805, Chapter 3, elements must be approved by NRC via license amendment.</p>

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Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

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	NFPA 805 , including any request to use performance-based methods for these elements as permitted under 10 CFR 50.48(c)(2)(vii);	
56	<p>3.2.4 Plant Changes Without Prior NRC Approval</p> <p>The framework established by Regulatory Guide 1.200 indicates that the NRC does not "approve" risk assessment methods.</p>	<p>This comment is in reference to RG 1.200, which was not the subject of this comment solicitation. Note that NFPA 805 Section 2.4.3.3 states that the "approach, methods, and data shall be acceptable to the AHJ" when a licensee performs a fire risk evaluation. Refer also to the resolution of comments 1 and 75 for more information of the acceptability of PRA methods.</p>
57	<p>Recommend the following change:</p> <p>"...Risk assessment methods are adequate if the method used to estimate the change is acceptable to the AHJ as defined in FAQ 09-xxxx" has been previously reviewed and approved by the NRC and the PRA meets the guidance in Regulatory Position 4.3."</p>	<p>The staff disagrees with the comment because NFPA 805 Section 2.4.3.3 states that the "approach, methods, and data shall be acceptable to the AHJ" when a licensee performs a fire risk evaluation. Also a FAQ on acceptable methods had not been received by the NRC at the time this comment was addressed. The DG-1218 text represents the current staff position. When a FAQ is proposed and resolved, this section of the RG will be revised to reflect any changes, or the section of NEI 04-02 containing the consensus position will be endorsed.</p> <p>However, the staff improved the guidance regarding methods. See response to comments 1 and 75.</p>
58	<p>3.2.5 Combined Changes and Cumulative Risk of Changes</p> <p>(Note: the comments were lettered by NRC staff to facilitate resolution.)</p> <p>a) There does not appear to be a valid technical or legal reason to "track" the cumulative risk impact against some "Rev 0" snapshot. It becomes a burden on multiple levels. All that is required is to maintain the PRA "as built" to reflect the "as built, as operated plant"</p> <p>b) There does not appear to be any recognition that there are values in the Internal Events PRA (that the Fire PRA is based upon) that change periodically based on plant events, industry</p>	<p>a) The staff has concluded that there are valid technical and legal reasons to track the cumulative risk. The technical reason is that without risk tracking, the change in risk acceptance guidelines can be bypassed or inadvertently misapplied solely by sequencing plant changes in a different manner. The legal reason is that NFPA 805, Section 2.4.4.1, requires the change in risk to be acceptable to the authority having jurisdiction (AHJ), and that the cumulative effect of previous changes be included in each change in risk evaluation. The staff recognizes that there is a burden associated with this tracking and concluded that the possibly numerous changes made during a licensee's transition to NFPA 805 need not be tracked after transition, so that the baseline risk for use in assessing the cumulative risk impact of changes is reset at that point. This concept is not a new position, but is described in both the current RG 1.205 and DG-1218. This one time reset will not result in the acceptance</p>

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Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

Comment #	Comment	Resolution
	operating history, etc. What is the obligation on the licensee, and what process would need to be followed, when the Internal Events PRA is updated with new reliability data, and that new data has a "ripple effect" on the Fire PRA results. This happens all the time. For example, the Northeast blackout affected the LOOP frequency in the PRA model at every plant in the country, due to the way that frequencies of events are calculated in the PRA for very low-frequency events.	<p>guidelines being bypassed or misapplied because the sequencing of changes during and after transition will not change the outcome of the comparison of the change in risk against the acceptance guideline. Licensees are required to indentify all non-compliances with NFPA 805 during transition, so any risk increases that should have been applied to transition but which are discovered after transition would be an error, and errors are not expected to be common or large. No change to DG-1218 was made as the result of this comment.</p> <p>b) The staff agrees that changes to the PRA may cause a “ripple effect” such that previous estimates of the change in risk may themselves change. If this “ripple effect” causes the acceptance guidelines to be exceeded, the change in risk, and the facility change being evaluated, might not meet the acceptance guidelines and therefore should not be implemented. No further changes to the FPP that increase risk would meet the acceptance guidelines until other FPP changes that decrease risk have been implemented. In most instances, risk-informed alternatives provide increased flexibility by utilizing risk estimates to support decisions that appropriately reflect the safety profile of a facility. In some instances, the decisions required to comply with the alternative may include modifying the existing facility in response to these risk estimates. No change to DG-1218 was made for this comment.</p>
61	<p><u>3.3 Circuit Analysis</u></p> <p><i>3.3.1 Identifying and Evaluating Risk-Significant Circuits</i></p> <p>The process in FAQ 07-0038, Rev. 1 should be referenced</p>	FAQ 07-0038 is currently unresolved. The DG-1218 text represents the current staff position. When the FAQ is resolved, this section of RG 1.205 will be revised to reflect any changes, or the section of NEI 04-02 containing the consensus position will be endorsed.
62	<p>[NEI 04-02, Section B.2.1, provides one acceptable approach for identifying and screening multiple spurious actuations ...]</p> <p>There is no screening process in FAQ 07-0038 Rev. 1. This statement is outdated and needs to reflect pilot plant lessons learned and industry efforts.</p>	<p>FAQ 07-0038 is currently unresolved. The DG-1218 text represents the current staff position. When the FAQ is resolved, this section of RG 1.205 will be revised to reflect any changes, or the section of NEI 04-02 containing the consensus position will be endorsed.</p> <p>The staff agrees with the second half of this comment. The reference to the</p>

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Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

Comment #	Comment	Resolution
		screening method in section B.2.1 of NEI 04-02 has been removed.
63	[The nuclear safety capability circuit analysis should address ...] The relevance of Regulatory Guide 1.106 is not evident.	RG 1.106 is relevant for licensees that desire to use thermal overload protection to address IN 92-18 issues. DG-1218 was revised to provide this basis for the reference.
64, 65	<p>3.3.2 High/Low Pressure Interface</p> <p>This guidance is not consistent with the development and approval of FAQ 06-0006. Concerns were raised over the closure memo of FAQ 06-0006 (dated 3/12/07) at an NFPA 805 FAQ meeting. The 10/18/07 FAQ meeting summary dated 11/28/07 (ML073200763) addressed the concerns that the closure memo deviated from the FAQ intent and content and stated:</p> <p><i>“The use of the NEI [Nuclear Energy Institute] 00-01, Revision 1, methodology to identify and evaluate high-low pressure interface valves has been previously accepted by the NRC. For the purpose of analyzing high-low pressure boundary valves in conducting the nuclear safety performance criteria methodology review for a NFPA 805 transition, the staff accepts the guidance provided in NEI 00-01, Revision 1, as one acceptable approach.”</i></p> <p>The guidance in this section of DG-1218 does not reflect previously agreed upon positions.</p>	The text in DG-1218 was deleted, because NEI 04-02, Revision 2, which DG-1218 endorses, adequately addresses the issue..
66	<p>See above [comment 64]</p> <p>It appears that the text of NFPA 805 is being misunderstood. As stated in Section 1.6.31 of NFPA 805, that a definition of a high low pressure interface is provided (also see NFPA 805 section A.1.6.31 for expanded discussion).</p> <p>The definition indicates that loss of inventory by itself cannot be mitigated in sufficient time to prevent an unacceptable</p>	See response to comment 64 and 65.

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Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

Comment #	Comment	Resolution
	<p>consequence. This is simply a process of classifying RCS interfaces as High/Low pressure interfaces, and not meant to "invoke" the performance-based portions of the standard. Therefore, there is no inference intended that a "performance based approach per NFPA 805 section 4.2.4" is intended.</p> <p>If the NRC believes that how high/low pressure interfaces are identified and classified needs to change, then a change to NFPA 805 would be required, via the Rulemaking process.</p>	
71	<p><u>4.3 Fire Probabilistic Risk Assessment</u></p> <p>It is stated that resolution of potentially risk-significant findings should be submitted. Clarification should be provided for "potentially risk-significant findings". It is important to recognize that different plant configurations, FPP implementation strategies, PRA modeling approach and role of PRA use will affect the significance of the open items.</p>	<p>The staff agrees that DG-1218 was not clear regarding the submittal and resolution of findings from peer reviews. DG-1218 has been changed to reference the guidance in RG 1.200.</p>
73	<p>The current revision allows the licensee to complete actions required as a result of the review later and simply submit a completion schedule for approval. The draft revision does not specify that the resolution of findings may be completed after the LAR is submitted.</p>	<p>The staff agrees that DG-1218 was not clear regarding the submittal and resolution of findings from peer reviews. DG-1218 has been changed to reference the guidance in RG 1.200.</p>
74	<p>Section 4.3, fourth paragraph: This paragraph should be deleted. It represents a level of detail associated with the preparation of a Fire PRA beyond that stipulated in the PRA Standard and Regulatory Guide 1.200. Further, the implied endorsement of NUREG/CR-6850 could be interpreted to mean that it is currently the only acceptable procedure for the detailed development of a Fire PRA. The earlier paragraphs and discussions are sufficient to invoke the PRA Standard and Regulatory Guide 1.200.</p>	<p>The staff agrees that the NRC should not endorse the methods in NUREG/CR-6850 in RG 1.205 because other acceptable methods may be used. The implied endorsement has been removed and Section C.4.3 of DG-1218 has been substantially re-written to allow licensees to use more detailed, plant-specific analyses to provide greater realism in the fire PRA model.</p>

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Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

Comment #	Comment	Resolution
75	<p>Recommend the following change:</p> <p>A licensee that has adopted NFPA 805 may use the PRA methods and quality requirements that are acceptable to the AHJ as defined in FAQ 09-xxxx” the NRC approves for generic use in evaluating FPP changes in risk, without requesting plant specific approval., provided that (1) the plant-specific license condition includes this provision and (2) the NRC generic approval clearly states that the method may be applied without a plant-specific license amendment.</p> <p>A statement is made on the use of screening methods or more quantitative PRA methods. If a screening method is used, or a bounding approach is used, which may be a subset of the PRA, for example certain elements of the fire PRA is accomplished by using/assuming a conservative value resulting in higher risk impact, should it be subject to another peer review?</p> <p>A statement is made on PRA methods and quality requirements that the NRC approves for generic use in evaluating the FPP changes in risk. It is clear, given the evolving and dynamic nature of the fire PRA, peer review by the owner's group or a team of peer fire PRA experts should play a critical role. A clarification or inclusion of the peer review role, recognizing the evolving and dynamic nature of fire PRA methods, should be provided.</p>	<p>The staff agrees that further clarification about which “methods” require approval by the staff is needed. Section C.4.3 of DG-1218 has been substantially revised to address this and related comments. The PRA Standard, as endorsed by RG 1.200 provides guidance on when peer reviews should be performed. The role of peer review in assuring PRA quality has been clarified in the guide by referring to RG 1.200.</p> <p>Also, a FAQ on acceptable methods had not been received by the NRC at the time this comment was addressed. When a FAQ is proposed and resolved, this section of the RG will be revised to reflect any changes, or the section of NEI 04-02 containing the consensus position will be endorsed.</p>
78	<p>REGULATORY ANALYSIS</p> <p>It is not clear given that the expected cost of potential modifications and other implementation costs pre-transition to NFPA 805 and post-NFPA 805 transition programmatic and infrastructure change, plant specific cost-benefit analysis on a case-by-case basis may be required to achieve a more realistic cost-benefit analysis of potential regulatory issues including</p>	<p>The industry proposal, to perform licensee-specific cost/benefit analyses is not practical and in any event would not support issuance of a generic guidance document such as this guide. Accordingly, the implicit suggestion that a licensee-specific regulatory analysis be performed for each NFPA 805 application is neither practical nor legally required.</p>

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Table 1: Resolution of Comments from the Nuclear Energy Institute (NEI)

Comment #	Comment	Resolution
	those identified during inspection.	

Comments from Dennis Henneke, GE Hitachi

Table 2: Resolution of Comments from GE Hitachi

Comment #	Comment	Resolution
1	<p>Regulatory Position 2.4 [“Recovery Actions”]</p> <p>This position does not meet the intent of NFPA 805, or the intent of the transition process as defined in the original rulemaking. As one of the original contributors/authors of NFPA 805, we had two basic philosophies that we developed the guideline; a) A Full Fire PRA is not required for transition, and b) Safe-today, Safe tomorrow. In the later case, if an action was already approved, then this was safe today and did not require a change evaluation per NFPA 805. In NFPA 805, in fact, there was the provision to use existing licensing documents and approvals, and to assume those approvals are treated as deterministically. In the definition of Plant Change Evaluation, for example, the change analysis is required for any change to a previously approved fire protection program element. Also, under the fundamental fire protection program, NFPA 805 states that previously approved alternatives take precedence over the requirements in 805.</p> <p>The problem with the regulatory position is that it increases the overall burden to develop and maintain the license basis, with no apparent improvement to the plant. As originally envisioned, the NFPA 805 process would take around \$1M to transition and around ½ person to maintain. Due to the continued ratcheting of the NRC on issues like this, the overall cost of transition has increased around 10 fold, and</p>	<p>Consensus documents such as NFPA 805 are generally strengthened by the contribution of numerous individuals from a variety of organizations, many of which do not share the same intent. The NRC can not regulate in accordance with intent reported by a contributing individual or organization when that intent appears contrary to the consensus document. In this case, Section 4.2.3 and 4.2.4 clearly require that the additional risk of some recovery actions be evaluated, with no reference to prior approval.</p> <p>The staff disagrees that the cost associated with evaluating the additional risk from recovery actions is high. Such actions are already modeled in the PRA and the method to evaluate the impact of operation actions exists and has been used for operator actions that have not been previously approved. Including recovery actions as described in DG 1218 might simply increase the number of operator actions included in the change in risk estimate.</p> <p>The staff modified the description of which recovery actions need to have the additional risk evaluated to be consistent with NFPA 805 Section 4.2.3.1 which addresses, in part, the commenter’s concerns.</p> <p>Substantial changes were made to Regulatory Position 2.2.4 in DG-1218 to address assessing the additional risk of previously-approved recovery actions; see also the response to NEI Comment #25.</p>

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Table 2: Resolution of Comments from GE Hitachi

Comment #	Comment	Resolution
	the cost of maintaining the program has increase to around 2 persons.	
2	<p>Section 4.3, Paragraph 5 [“Fire Probabilistic Risk Assessment”]</p> <p>The interpretation of the NRC to this requirement in 805 appears to over-extend the intent of what is written in 805. When originally written, the Fire PRA standard was not yet complete. Additionally NUREG/CR-6850 was not yet complete. It was the intent that if Fire PRA were performed using NUREG/CR-6850, this would be the level of requirement for approval by the AHJ. Additionally, if a full fire PRA was performed (remember again, not a requirement of 805), that the Fire PRA would be reviewed against the standard. However, NUREG/CR-6850 (and the standard) do not include a lot of details in some areas. The plant should not be required to submit any interpretation or extension of the NUREG/CR-6850 method to the NRC. If required, the regulatory interpretation of the requirement might be extended to anything not specifically covered in 6850. This requirement is not in the best interest of the public, the plant or the NRC. Here are a few examples of technical areas not addressed in NUREG/CR-6850, just to give an idea of the possible scope of the extension of the Section 4.3 requirements:</p> <ul style="list-style-type: none"> a) A PWR without MG sets, but has a series of electrical cabinets (in its place), assumes the MG set fire frequency as a subsection of the electrical cabinet fire frequency calculation. b) NUREG/CR-6850 has guidance on fire spread through overhead cable trays, and delayed fire damage due to cable coatings. However, there is no model for fire spread through overhead cable trays with cable coatings. c) NUREG/CR-6850 provides no guidance on how to apply factors for hot short duration. Methods for determining the factors is in FAQ 050, but the methods for applying the factors are not yet documented. d) Methods for quantifying risk, such as the use of the FRANC code, are explicitly not included in NUREG/CR-6850. 	<p>Regulatory Position 4.3 of DG-1218 has been substantially re-written to address this comment. See responses to NEI comments #71 through #77,</p>

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Table 2: Resolution of Comments from GE Hitachi

Comment #	Comment	Resolution
	The interpretation of the guidance is that the Fire PRA should be performed against the ASME Standard, as verified through peer review or review by the NRC (for the pilot plants).	
3	<p>Regulatory Position 4.2 [“Fire Models”]</p> <p>NFPA 805 allows for the use of Fire Modeling as an option, but this is specifically not allowed under the NRC guidance unless a change evaluation is performed (under the performance based approach). It was the intent to include this as an option by the NFPA 805 authors, as agreed upon during consensus of the standard, without a change evaluation. Removal of this option is another example of ratcheting of the amount and scope of work required by the NRC to transition to NFPA 805.</p>	<p>Contrary to the comment that fire modeling would never require a change evaluation, Section 2.4.4 of NFPA 805 states that a plant change evaluation is required for any change to a previously approved fire protection program element. Therefore, if fire modeling is used to change a previously approved fire protection program element, a plant change evaluation is needed. Section 2.2.4 of DG-1218 explicitly mentions use of the fire modeling performance-based method as allowed in the rule. No change to DG-1218 was made.</p>
4	<p>3.3.2 [“High/Low Pressure Interface”]</p> <p>The discussion in NFPA 805 for High/low pressure interfaces is only in the definition sections, and the circuit analysis for these (what circuits are required, etc.) is included in NEI 00-01, chapter 3. As such, the analysis of High/low pressure interface flow paths should be no different inside and outside of NFPA 805, and the screening of certain flow paths due to pressure of the piping being adequate, small flow not affecting safe shutdown, etc., should not be considered performance based per the NFPA 805 definition. As stated above, the change evaluations are limited by definition to those changes to the existing fire protection program. Since the high/low pressure interface analysis exists in the previous program, the evaluation should not require a change evaluation.</p>	<p>See resolution of NEI comments 64-66.</p>
5	<p>Section 4.3 [“Fire Probabilistic Risk Assessment”]</p> <p>Note that RG 1.200, revision 2 has been issued and should be referenced.</p>	<p>DG-1218 has been revised to refer to RG 1.200, revision 2.</p>
6	<p>Section 4.3 [“Fire Probabilistic Risk Assessment”]</p>	<p>The staff has changed Regulatory Position 4.3 of DG-1218 to</p>

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Table 2: Resolution of Comments from GE Hitachi

Comment #	Comment	Resolution
	<p>The use of the term “potentially risk significant findings” is inappropriate. Per NEI 07-12 and NEI 05-04, the peer review will provide findings and observations. Findings are those issues considered systematic, or potentially affect the PRA results. However, these are more than just risk significant findings, since risk significant under RG 1.200 and 1.174 has a different meaning. Recommend changing the wording to just “peer review findings.”</p>	<p>reference the submittal guidance in RG 1.200.</p>
7	<p>Section 4.3 [“Fire Probabilistic Risk Assessment”]</p> <p>Since the change evaluations are not specifically approved by the NRC and can be performed after the license application for NFPA 805, the reference to Capability Category III appears in appropriate.</p>	<p>The staff disagrees that the change evaluations need not be approved by the NRC. The staff will review and approve the change evaluations relied upon for transition in accordance with RG 1.174, RG 1.200, and the final version of DG-1218 when it is issued. Changes after the transition that may not be self-approved using the license condition will also be reviewed and approved by the staff. The staff only requires the PRA to be technically adequate, which may or may not require capability category III in any given supporting requirement in the PRA standard. DG 1218 was revised to include the direction, from the ASME Standard endorsed in RG 1.200, that the licensee consider whether the application requires any Capability Category III SR’s.</p>

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Comments from NFPA

Table 3: Resolution of Comments from NFPA

Comment #	Comment	Resolution
1	NFPA supports the use of guidance documents that will help the public understand NRC's regulations, methods and techniques used for evaluating specific problems or postulated accidents and data required for permit applications and licenses such as the information set forth in NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants.	This comment supports issuance of NRC regulatory guidance. No change to DG-1218 was made.
2	Please note that the 2001 edition is considered to be outdated material and that the reference should be updated accordingly. There is a 2006 edition that is available now and a 2010 edition that is currently being developed.	10 CFR 50.48 would have to be revised in order to incorporate the newer edition of NFPA 805. This will be considered at such point in time that the rule is being revised. No change to DG-1218 was made.

Comments from Southern Nuclear Operating Company

Table 4: Resolution of Comments from Southern Nuclear Operating Company

Comment #	Comment	Resolution
1	The proposed revision to Regulatory Guide 1.205 specifically endorses by reference the latest edition of NEI 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)," (Revision 2) as an acceptable guidance document for NFPA 805, "Performance-Based Standard for Fire Protection for Light-Water Reactor Electric Generating Plants" transition. Overall, both DG-1218 and NEI 04-02 address transitioning existing nuclear plant fire protection programs to NFPA 805. However, neither DG-1218 nor NEI 04-02 address fire protection program requirements for new nuclear plants. Thus, either Regulatory Guide 1.205 or NEI 04-02 needs to be revised to accommodate new nuclear	Section 1.1 of NFPA 805, 2001 edition, "Scope," states: "This standard specifies the minimum fire protection requirements <u>for existing light water nuclear power plants</u> during all phases of plant operation, including shutdown, degraded conditions, and decommissioning." (emphasis added) Therefore, NFPA 805 does not apply to new nuclear plants. DG-1218 is consistent with this. No change to DG-1218 was made.

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Table 4: Resolution of Comments from Southern Nuclear Operating Company

Comment #	Comment	Resolution
	plants or new guidance documents need to be developed in order to adopt a risk-informed licensing basis should a risk-informed/ performance-based fire protection licensing bases either be required for new reactors or licensees choose to adopt one in lieu of deterministic fire protection licensing bases.	

Comment from Norman Merriweather

Table 5: Resolution of Comments from Norman Merriweather

Comment #	Comment	Resolution
1	<p>Section 2.2.4 of Draft Regulatory Guide DG-1218 does not appear to be consistent with NFPA 805 Section 2.4.3 in calculating the fire risk in that:</p> <p>NFPA 805, Section 2.4.3, Fire Risk Evaluations states in part that the PSA methods, tools, and data used for the performance-based evaluation shall conform with the requirements in 2.4.3.1 through 2.4.3.3. In Section 2.4.3.3 it requires that the PSA be based on the as-built and as-operated and maintained plant, and reflect the operating experience at the plant. NFPA 805 Section 4.2.4.2, Use of Fire Risk Evaluation, states that, “The fire risk shall be calculated using the approach described in 2.4.3.”</p> <p>Contrary to the above, it appears that the method for calculating the fire risk in Section 2.2.4 of DG-1218, is not consistent with the above because it does not use the as-built and as-operated and maintained plant in the calculation. It states that, “The change in risk should be the difference between the post-transition plant configuration and the NFPA 805, Section 4.2.3, deterministically compliant configuration.”</p>	<p>The staff does not agree that the proposed guidance conflicts with the cited sections of NFPA 805. NFPA 805 Section 4.2.4.2 also states: “The evaluation process shall compare the risk associated with implementation of the deterministic requirements with the proposed alternative.” The “proposed alternative” is how the licensee intends to leave the plant once implementation of NFPA 805 is complete, including any necessary plant modifications. The staff agrees that, once NFPA 805 implementation is complete, the PRA must be based on the as-built and as-operated and maintained plant, and reflect the operating experience at the plant – which is what DG-1218 preserves by specifying the “post-transition plant configuration.”</p> <p>Also, the sample license condition will not allow self approval of risk increases until full implementation of NFPA 805, including necessary modifications. No change to DG-1218 was made.</p>