

**Response to Public Comments on Draft Regulatory Guide DG-1362,  
“Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities”  
Proposed Revision 3 of Regulatory Guide 1.200**

On July 1, 2020, the Nuclear Regulatory Commission (NRC) published a notice in the *Federal Register* (85 FR 39599) announcing that Draft Regulatory Guide 1362 (DG-1362, proposed Revision 3 of Regulatory Guide (RG) 1.200) was available for public comment. The published version of DG-1362 was made available in the NRC’s Agencywide Document Access and Management System (ADAMS) under accession number ML19308B636. The public comment period ended on July 31, 2020. The NRC received comments from the stakeholders listed below in the first table. The second table presents the commenters’ original submitted comments, as sourced from the publicly available document under the ADAMS accession number noted for each commenter, and documents the NRC resolution of each of those comments.

<p>Mr. Matthew Degonish Dated: July 8, 2020</p> <p>ADAMS Accession No.: ML20191A213</p>	<p>Ms. Victoria K. Anderson &lt; vka@nei.com &gt; Nuclear Energy Institute 1201 F Street, NW, Suite 1100 Washington, DC 20004 Dated: July 29, 2020</p> <p>ADAMS Accession No.: ML20213C659</p>	<p>Mr. Michael Powell PWR Owners Group 1000 Westinghouse Drive, Suite 172 Cranberry Township, PA 16066 Dated: July 29, 2020</p> <p>ADAMS Accession No.: ML20213C660</p>
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Commenter	Specific Comments	NRC Resolution
<p>1. Mr. Matthew Degonish</p>	<p>Paragraph 2 of Section 2.2.4 of Draft Regulatory Guide 1.200 Revision 3 has the following statement:</p> <p>"Differences between the current version of ASME/ANS RA-Sa-2009, as endorsed by the NRC, and the earlier version (ASME RA-Sb-2005) should be identified and addressed by the licensee in a risk-informed application."</p> <p>This statement needs clarification. As it is currently worded, it prescribes the need to assess difference between the current endorsed version of the PRA Standard (i.e., ASME/ANS RA-Sa-2009) and the earlier version (i.e., ASME RA-Sb-2005). The sentence should be updated to specify that this is a requirement when providing a submittal based on the earlier version of the standard. The following is a recommendation for the change:</p> <p>"When relying upon an earlier version of the standard (e.g., ASME RA-Sb-2005), differences between the current version of ASME/ANS RA-Sa-2009, as endorsed by the NRC, should be identified and addressed by the licensee in a risk-informed application."</p>	<p>The NRC agrees with the comment. The NRC revised the cited statement to indicate that differences between the final published version of ASME/ANS RA-Sa-2009, as endorsed by the NRC, and the earlier version (ASME RA-Sb-2005) should be identified and addressed by the licensee in a risk-informed application when ASME RA-Sb-2005 was used to demonstrate the acceptability of the licensee's base PRA for risk-informed PRA applications.</p>

<p>2. Nuclear Energy Institute</p>	<p>The <i>Federal Register</i> Notice solicited comments on whether or not licensees should periodically close all of their PRA peer review findings to ensure confidence in the information used in risk-informed programs. NEI and its members do not support such an addition to RG 1.200, as the configuration control criteria in NEI 17-07, "Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard," PWROG 19027-NP, "Newly Developed Method Requirements and Peer Review," and the ASME/ANS PRA Standard itself, all of which are endorsed in DG-1362, are sufficient to ensure fidelity of information used in risk-informed applications. The configuration control, or maintenance and upgrade, processes are included as part of the PRA peer review, and NRC has access to documentation of these reviews as part of their review of License Amendment Requests. No additional language is needed in DG-1362 relative to configuration control to provide such assurance. It is unclear if there has ever been a regulatory concern that would be addressed by such a requirement; if such examples exist, NEI would welcome a dialogue with NRC and other stakeholders to discuss the specific occurrences and determine the best means to address them.</p>	<p>The NRC reviewed the Nuclear Energy Institute's (NEI) comment together with the related comments from the PWR Owners Group (See NRC Resolution for comments 17 and 18 in this document). The NRC believes it is appropriate to include additional guidance with respect to the prolonged retention of open F&amp;Os, because such F&amp;Os can impact the implementation of risk-informed programs, particularly when many open F&amp;Os have accumulated. For example, this could result in increased level of effort in the NRC's review of future licensing actions and potential inspections such as those that may be necessitated if licensees incorporate NDMs to their PRA models.</p> <p>Thus, the NRC does not agree with NEI's statement that no additional language is needed in DG-1362 to ensure fidelity of information used in risk-informed applications. When a licensee submits a risk-informed license amendment request (LAR), the licensee and NRC staff must apply resources for the review of the open F&amp;Os associated with the licensee's PRA. However, a change to the configuration control program that would include closure of open F&amp;Os could help ensure the quality of the PRA by closing the F&amp;Os using acceptable processes and eliminate additional resource burden for NRC staff and licensees in reviewing future applications. As such, in consideration of comments related to the <i>Federal Register</i> notice questions from NEI and the PWR Owners Group, the NRC modified the guidance in regulatory position C.2.2 as follows:</p> <p>"For example, a peer review may be performed on the base PRA model or on a PRA upgrade, which may involve use of an NDM, or in the form of an independent assessment reviewing the closure of facts and observations (F&amp;Os) from a peer review. Closure of F&amp;Os could enhance the efficiency of NRC reviews of risk-informed applications that use PRA models. F&amp;Os that are not closed using an NRC-endorsed process should be evaluated by the licensee or applicant for their impact on a risk-informed application and addressed with documented justification with necessary changes made to the PRA prior to the use of PRA in</p>
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		the risk-informed application. The following sections provide guidance on each of these scenarios.”
3. Nuclear Energy Institute	<p>RG 1.200 is applicable to risk-informed licensing applications. However, this draft revision does not distinguish between risk-informed licensing applications and other risk-informed activities. This is an important distinction, as risk-informed activities constitute a much larger scope than licensing applications. It is not necessary to conduct large-scale PRA technical acceptability reviews for all of these activities, particularly for those that use risk information without strong reliance on specific numerical results. Change “application” to “licensing application” throughout the document as appropriate</p>	<p>The NRC has noted the comment but does not agree that “application” should be changed to “licensing application” throughout the document due to the following reasons.</p> <p>DG-1362 uses the term “application” consistent with the definition of the term “PRA application” from ASME/ANS RA-Sa-2009, as endorsed by the NRC, which is also the term used and endorsed in Revision 2 of RG 1.200. The term “PRA application” is generally defined in ASME/ANS RA-Sa-2009 as, “a documented analysis based in part or whole on a plant-specific PRA that is used to assist in decision making with regard to the design, licensing, procurement, construction, operation, or maintenance of a nuclear power plant.” The NRC staff position regarding situations requiring licensees to demonstrate acceptability of PRA results using RG 1.200 or comparable means is provided in application-specific guidance. As such, the NRC has not made any related changes to RG 1.200.</p>

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4. Nuclear Energy Institute	<p>NEI understands that NRC does not intend to sunset Revision 2 of RG 1.200 with issuance of Revision 3. This is important to licensees, as many have conducted PRA technical acceptability evaluations for ongoing and upcoming risk-informed licensing applications using Revision 2, and there is little value in repeating these evaluations given that the same standard is endorsed in both revisions. A clear statement from NRC on the retention of RG 1.200 Revision 2 is important to the operating fleet to support continued use of risk-informed licensing processes.</p>	<p>The NRC staff notes and agrees with the comment on Revision 2 of RG 1.200. Revision 2 of RG 1.200 will not be withdrawn upon issuance of RG 1.200, Revision 3. Revision 2 will remain available for reference and use after Revision 3 is issued. No change was made to RG 1.200, Revision 3 as a result of this comment.</p> <p>Also note that regulatory guides are not substitutes for regulations and compliance with them is not required. Methods and solutions that differ from those set forth in RGs may be deemed acceptable if they provide a basis for the findings required for the issuance of a permit, license, or license amendment by the Commission.</p> <p>The following caveat is important if a licensee chooses to use different versions of RG 1.200 in support of an application. The NRC issues RGs to describe to the public, methods that the staff considers acceptable for use in implementing specific parts of the agency's regulations, to explain techniques that the staff uses in evaluating specific problems or postulated events, and to provide guidance to applicants. The staff anticipates that a licensee will reference and follow one revision of RG 1.200 for a given PRA application. If deviations from the referenced revision are made, including using alternatives available in the other revisions of the RG, each deviation should be appropriately identified and justified. This caveat does not apply to applications for which the licensee has not committed to use RG 1.200.</p>

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5. Nuclear Energy Institute	<p>While NEI issued NEI 17-07 to follow on from NEI 05-04, NEI 07-12, and NEI 12-13, these three documents should remain an accepted NRC approach for conducting peer reviews. Retaining (not sunseting) RG 1.200, Rev. 2 would accomplish this, and would support licensees who have conducted peer reviews in the decades since Rev. 2 was issued.</p> <p>In issuance of RG 1.200, Rev. 3, specify that Rev. 2 is still an acceptable approach to the NRC.</p>	<p>The NRC agrees that previous revisions of RG 1.200 will not be discontinued upon issuance of RG 1.200, Revision 3. Revision 2 of RG 1.200 will remain available for reference and use after Revision 3 is issued. No change was made to RG 1.200, Revision 3 as a result of this comment.</p> <p>The following caveat is important if a licensee chooses to use different versions of RG 1.200 in support of an application. The NRC issues RGs to describe to the public, methods that the staff considers acceptable for use in implementing specific parts of the agency's regulations, to explain techniques that the staff uses in evaluating specific problems or postulated events, and to provide guidance to applicants. The staff anticipates that a licensee will reference and follow one revision of RG 1.200 for a given PRA application. If deviations from the referenced revision are made, including using alternatives available in the other revisions of the RG, each deviation should be appropriately identified and justified. This caveat does not apply to applications for which the licensee has not committed to use RG 1.200.</p>

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<p>6. Nuclear Energy Institute</p>	<p>In Table 17, “as-to-be-built, as-to-be-operated” is too narrow in scope and should be adjusted to recognize that this status can apply to operating reactors with planned modifications. Remove the “in the case of a DC or COL application” qualifier of “as-to-be-built, and as-to-be-operated”</p> <p>----</p> <p>See page 42, regulatory position C.2.2.1</p>	<p>The NRC agrees that the terms “as-to-be-built” and “as-to-be-operated” may be applicable to operating plants as there may be special circumstances where credit for planned modification(s) in the PRA model is appropriate and these applications are addressed by the staff on a case-by-case basis.</p> <p>However, the NRC disagrees with the proposed change, because it could affect the clarity of expectations for design certification (DC) and combined license (COL) applications since the terms “as-to-be-built” and “as-to-be-operated” have been interpreted as defined in DG-1362 by applicants, licensees, and NRC staff during past DC and COL reviews. As such, the NRC has added a footnote to the seventh bullet in Table 17 of the regulatory position C.2.2.1 to include the following language:</p> <p>“The NRC recognizes there may be special circumstances where credit for planned modification(s) in the PRA model is appropriate and these applications are addressed by the staff on a case-by-case basis. Regarding the peer review of a base PRA model that credits planned modifications to an operating plant, licensees or applicants should provide details of the planned modifications to the peer review team in advance of the peer review. These details should include any spatial information associated with the planned modification that may impact, for example, internal flood, internal fire, seismic, high-wind, or external flood PRA, or other PRAs of hazards that are dependent on spatial information. The resulting peer review report should clearly identify any planned modifications reviewed by the peer review team. Regulatory position C.4.2 provides guidance on submittal documentation for such cases.”</p> <p>Additionally, the NRC revised regulatory position C.4.2 to include the following statement, “A peer review of planned modifications should clearly identify and describe the plant modifications and design changes that are modeled in the PRA but are not completed at the time of the licensing application submittal.”</p>

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7. Nuclear Energy Institute	<p>Table 17 should reflect that walkdowns are not needed for all peer reviews. Add “as appropriate” after “Performs independent walkdowns of the plant to confirm PRA inputs.”</p> <p>----</p> <p>See page 42, regulatory position C.2.2.1</p>	<p>The NRC notes that a walkdown may not be needed for every peer review; however, the NRC disagrees with the proposed change since the use of the word “as appropriate” does not sufficiently describe the conditions under which a walkdown is appropriate. Therefore, NRC has revised the eighth bullet in Table 17 as follows:</p> <p>“Performs independent walkdowns of the plant to confirm PRA inputs when information about plant configuration, or other aspects of the plant (e.g., spatial aspects) modeled in the PRA, are important to the development of PRA inputs and the acceptability of the base PRA (e.g., as related to internal flood, internal fire, seismic, high-wind, or external flood PRA, or other PRAs of hazards that are dependent on spatial information)”</p>
8. Nuclear Energy Institute	<p>It is not fully accurate that “All supporting requirements related to NDMs are applicable for peer review of NDMs.” Depending on the scope of the method, some of the NDM SRs may not be applicable. Replace with “All supporting requirements related to NDMs should be evaluated during peer review of NDMs.”</p> <p>----</p> <p>See page 40, regulatory position C.2.1</p>	<p>The NRC agrees with the comment and revised the text as proposed and to state that if any supporting requirements are determined to be inapplicable, justification for that conclusion should be documented.</p>

Commenter	Specific Comments	NRC Resolution
<p>9. Nuclear Energy Institute</p>	<p>This section states, “A peer review is performed on a PRA upgrade, which includes the use of an NDM in a PRA.” However, this is not strictly true, as the driver for PRA peer reviews of an upgrade is the use of such an upgrade in a risk-informed licensing application. Replace the statement with “Prior to use in a licensing application, a peer review should be performed on a PRA upgrade, including the use of an NDM in a PRA.”</p> <p>----</p> <p>See page 43, regulatory position C.2.2.2</p>	<p>The NRC notes that the use of a newly developed method (NDM) by itself may not result in a peer review, but that the use of an NDM in a risk-informed application should result in a peer review.</p> <p>However, the NRC disagrees that a peer review is necessary only in support of a risk-informed licensing application. The NRC notes that, after being approved by the NRC, a number of risk-informed applications enable licensees to change regulated operating and engineering parameters using the base PRA and relevant application-specific guidance, without prior NRC approval. Therefore, the NRC revised the cited statement as follows:</p> <p>“A peer review should be performed on a PRA upgrade prior to using the upgraded PRA model in support of a PRA application, either for an approved risk-informed program (e.g., risk-informed completion times, 10 CFR 50.69, surveillance frequency control program, NFPA 805), or in the submittal of a risk-informed PRA application for NRC review. The use of an NDM in a PRA is considered a PRA upgrade.”</p>

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10. Nuclear Energy Institute	<p>This section includes a clarification to NEI 17-07, which states that, "Documentation of the resolution of a peer review finding should describe how the deficiency in the finding was addressed such that it can be easily demonstrated that the associated supporting requirement is met." However, this expectation is already defined in NEI 17-07 on page E-4, where it is stated that the assessment report should include "A summary of the review team's decisions for each finding within the scope of the review, along with the rationale for determination of adequacy or inadequacy for closure of each finding in relation to the affected portions of the associated SR. If multiple SRs are referenced by a single finding, the affected portions of all associated SRs should be addressed." Remove this clarification.</p> <p>----</p> <p>See page 44, regulatory position C.2.2.3</p>	<p>The NRC agrees with the comment and revised the text as proposed.</p>
11. Nuclear Energy Institute	<p>Paragraph 2 of this section states, "Differences between the current version of ASME/ANS RA-Sa-2009, as endorsed by the NRC, and the earlier version (ASME RA-Sb-2005) should be identified and addressed by the licensee in a risk-informed application." This statement needs clarification. As it is currently worded, it prescribes the need to assess differences between the current endorsed version of the PRA Standard (i.e., ASME/ANS RA-Sa-2009) and the earlier version (i.e., ASME RA-Sb-2005). The sentence should be updated to specify that this is a requirement when providing a submittal based on the earlier version of the standard. Replace the sentence with "When relying upon an earlier version of the standard (e.g., ASME RA-Sb-2005), differences between the current version of ASME/ANS RA-Sa-2009, as endorsed by the NRC, should be identified and addressed by the licensee in a risk-informed application."</p> <p>----</p> <p>See page 45, regulatory position C.2.2.4</p>	<p>The NRC agrees with the comment. The NRC revised the cited statement to indicate that differences between the final published version of ASME/ANS RA-Sa-2009, as endorsed by the NRC, and the earlier version (ASME RA-Sb-2005) should be identified and addressed by the licensee in a risk-informed application when ASME RA-Sb-2005 was used to demonstrate the acceptability of the licensee's base PRA for risk-informed PRA applications.</p>

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<p>12. Nuclear Energy Institute</p>	<p>The second paragraph should be revised to allow for peer review of scheduled plant modifications. After “(1) the PRA model, or those portions of the model required to support the application, represents the as-designed or as-built and as-operated plant,” add “or as-to-be-built, as-to-be-operated plant” to reflect the potential for review of scheduled modifications.</p> <p>----</p> <p>See page 48, regulatory position C.3.3</p>	<p>The NRC agrees that the second paragraph should be revised to allow for peer review of scheduled plant modifications for operating plants. The NRC recognizes there may be special circumstances where credit for planned modification(s) in the PRA model is appropriate and these applications are addressed by the staff on a case-by-case basis. As such, the NRC revised and added the following paragraph to regulatory position C.3.3 to include the following language:</p> <p>“The NRC recognizes there may be special circumstances where credit for planned modification(s) in the PRA model is appropriate and these applications are addressed by the staff on a case-by-case basis. Regarding the peer review of a base PRA model that credits planned modifications to an operating plant, licensees or applicants should provide details of the planned modifications to the peer review team in advance of the peer review. These details should include any spatial information associated with the planned modification that may impact, for example, internal flood, internal fire, seismic, high-wind, or external flood PRA, or other PRAs of hazards that are dependent on spatial information. The resulting peer review report should clearly identify any planned modifications reviewed by the peer review team. Regulatory position C.4.2 provides guidance on submittal documentation for such cases.”</p> <p>Additionally, the NRC revised regulatory position C.4.2 to include the following statement, “A peer review of planned modifications should clearly identify and describe the plant modifications and design changes that are modeled in the PRA but are not completed at the time of the licensing application submittal.”</p>

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<p>13. Nuclear Energy Institute</p>	<p>The definition of “as-designed, as-to-be-built, as-to-be-operated” should be expanded to allow for peer review of a plant configuration including scheduled modifications. Add “or the PRA used to model the plant configuration that reflects future scheduled modifications” to the end of the definition.</p> <p>----</p> <p>See page 54, Glossary</p>	<p>The NRC understands there may be special circumstances where credit for planned modification(s) in the PRA model is appropriate and these applications are addressed by the staff on a case-by-case basis. However, the NRC disagrees that the definition of “as-designed, an-to-be-operated” should be expanded because that could affect the clarity of expectations for DC and COL applications. As such, the NRC revised the definition to add a footnote with the following language:</p> <p>“The NRC recognizes there may be special circumstances where credit for planned modification(s) in the PRA model is appropriate and these applications are addressed by the staff on a case-by-case basis. Regarding the peer review of a base PRA model that credits planned modifications to an operating plant, licensees or applicants should provide details of the planned modifications to the peer review team in advance of the peer review. These details should include any spatial information associated with the planned modification that may impact, for example, internal flood, internal fire, seismic, high-wind, or external flood PRA, or other PRAs of hazards that are dependent on spatial information. The resulting peer review report should clearly identify any planned modifications reviewed by the peer review team. Regulatory position C.4.2 provides guidance on submittal documentation for such cases.”</p> <p>Additionally, the NRC revised regulatory position C.4.2 to include the following statement, “A peer review of planned modifications should clearly identify and describe the plant modifications and design changes that are modeled in the PRA but are not completed at the time of the licensing application submittal.”</p>

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14. Nuclear Energy Institute	<p>The definition of PRA acceptability should be revised to reflect the context of PRA acceptability for a specific regulatory decision. Revise the definition to read “The ability of a PRA to support a specific risk-informed regulatory decision.”</p> <p>----</p> <p>See page 55, Glossary</p>	<p>The NRC agrees that the definition of the term “PRA acceptability” should be revised to reflect the context of PRA acceptability for a specific regulatory decision. However, the NRC does not agree with the change proposed by the commenter. The NRC revised the definition of “PRA acceptability” as follows to ensure the definition remains fully consistent with the content of the RG:</p> <p>“Measured in terms of PRA scope, the level of detail in the PRA, the PRA’s conformance with the PRA technical elements in regulatory position C.1.2 of this RG, and how closely the PRA represents a plant’s actual configuration and operations. PRA acceptability is determined for each risk-informed activity considering the staff positions in this RG, staff positions in relevant application-specific regulatory guidance, and any related requirements (e.g., license conditions) for the application.”</p>

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15. Nuclear Energy Institute	<p>The purpose of Appendix D is unclear, particularly given that RG 1.200 endorses the screening part of the ASME/ANS PRA standard and addresses other hazards in regulatory position C.1.2.9. The Appendix specifically states that “Table D-1 provides an extensive list and general description of the hazard groups and the hazards within those groups that should be considered during the development of a base PRA.” There is no context for what “should be considered” means beyond the screening endorsed in the ASME/ANS PRA Standard. Remove Appendix D from the document.</p>	<p>The NRC understands the comment but disagrees that Appendix D should be removed from the document. The purpose of Appendix D is to offer an enhanced understanding of hazards to be considered during the development of a base PRA or during screening performed in accordance with the Part 6 of ASME/ANS RA-Sa-2009, as discussed in regulatory position C.1.2.6 and as endorsed in Appendix A to this RG. Appendix D provides descriptions of the impacts of those hazards to be considered from Appendix 6-A to ASME/ANS RA-Sa-2009 as well as descriptions of hazard causes and conditions that should also be considered, consistent with the guidance in regulatory position C.1.2.6 of the RG. The NRC agrees that the list of hazards provided in Appendix D should be made consistent with the list of hazards provided in Appendix 6-A to ASME/ANS RA-Sa-2009. As such, the NRC revised the list of hazards provided in Table D-1 of Appendix D to be consistent with the list of hazards provided in Appendix 6-A to ASME/ANS RA-Sa-2009 and indicated in the second paragraph of Appendix D that the two lists are consistent.</p>

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16. Nuclear Energy Institute	This draft revision has a new appendix on Other Hazards (Appendix D), which is both duplicative and in conflict with the ASME/ANS PRA Standard endorsed by RG 1.200. NEI suggests deleting this appendix, as its inclusion reduces regulatory clarity.	The NRC disagrees that Appendix D is duplicative with respect to ASME/ANS RA-Sa-2009 and that Appendix D should be deleted. The purpose of Appendix D is to offer an enhanced understanding of hazards to be considered during the development of a base PRA or during screening performed in accordance with the Part 6 of ASME/ANS RA-Sa-2009, as discussed in regulatory position C.1.2.6 and as endorsed in Appendix A to this RG. Appendix D provides descriptions of the impacts of those hazards to be considered from Appendix 6-A to ASME/ANS RA-Sa-2009 as well as descriptions of hazard causes and conditions that should also be considered, consistent with the guidance in regulatory position C.1.2.6 of the RG. However, the NRC agrees that the list of hazards provided in Appendix D should be made consistent with the list of hazards provided in Appendix 6-A to ASME/ANS RA-Sa-2009. As such, the NRC revised the list of hazards provided in Table D-1 of Appendix D to be consistent with the list of hazards provided in Appendix 6-A to ASME/ANS RA-Sa-2009 and indicated in the second paragraph of Appendix D that the two lists are consistent.

<p>17. PWR Owners Group</p>	<p>Regarding the first NRC question provided in the <i>Federal Register</i> notice: For clarification, in the peer review process, not all F&amp;Os represent exceptions and deficiencies. There are four types of F&amp;Os: Findings, Suggestions, Best Practices and Unreviewed Analysis Methods (UAM). Of these, only Findings represent exceptions and deficiencies in the PRA model. Unreviewed analysis methods are related to areas where the peer review team either did not have the expertise or enough time to review those technical aspects of the model. As such, only Findings and UAMs have the potential to impact the technical adequacy of the PRA model.</p> <p><u>UAM F&amp;Os:</u></p> <p>UAM F&amp;Os that are identified as part of a model that is used to support a PRA application should be addressed through an appropriate focused scope peer review (as identified in NEI 17-07), prior to using the model for a PRA application. Any finding F&amp;Os identified during the peer review of the UAM should be addressed as noted below for findings.</p> <p><u>Finding F&amp;Os:</u></p> <p>As part of a risk informed License Amendment Request, any findings that are open at the time of the application are required to be assessed for their impact on the application. This includes justification that the PRA model remains technical adequate with the open finding. This justification is reviewed by the NRC as part of the License Amendment Request (LAR) review process and any issues regarding PRA technical adequacy are addressed in the safety evaluation, which may include limitations or conditions on the use of the model with the open F&amp;O(s).</p> <p>Findings from new peer reviews that are performed following a PRA upgrade after a model has been determined to be technical adequate for a regulatory application should be evaluated prior to using the model for that application. If a finding is not closed, a documented justification should be prepared for using the model for regulatory applications with the open finding. In some cases, the finding may be fully addressed, and changes incorporated</p>	<p>The NRC reviewed this comment and Comment 18 together with the related Comment 2 received from the NEI . The NRC understands the views offered by the commenters. For comment 17, the NRC agrees with a number of statements provided by the commenter, but does not agree with following statements from this comment:</p> <p><i>“As RG 1.200 provides guidance for all formal risk informed LARs, regardless of the importance of the PRA model to the application, the impact and needed for finding closures is highly dependent on the specific application that a licensee has implemented. Therefore, any regulatory expectations associated with finding closure should not be a part of RG 1.200 but should be considered in application specific guidance.”</i></p> <p>NRC believes that it is appropriate to include guidance that is applicable to all risk-informed applications including risk informed LARs in RG 1.200 because the findings made by the peer review team are made on the base PRA (i.e., they are not application-specific). Since the NRC believes that guidance on closure of finding-level F&amp;Os for the purpose of improving the efficiency of LAR reviews and oversight activities should be unambiguous, after considering the responses from NEI and PWR Owners Group, the NRC has revised regulatory position C.2.2 as follows:</p> <p><i>“For example, a peer review may be performed on the base PRA model or on a PRA upgrade, which may involve use of an NDM, or in the form of an independent assessment reviewing the closure of facts and observations (F&amp;Os) from a peer review. Closure of F&amp;Os could enhance the efficiency of NRC reviews of risk-informed applications that use PRA models. F&amp;Os that are not closed using an NRC-endorsed process should be evaluated by the licensee or applicant for their impact on a risk-informed application and addressed with documented justification with necessary changes made to the PRA prior to the use of PRA in the risk-informed application. The following sections provide guidance on each of these scenarios.”</i></p>
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into the model (including an internal review consistent with the licensee's PRA maintenance program prior to implementation) without going through the formal finding closure process. Formal closure of findings is a benefit to the licensee as it eliminates the need to continue to address/evaluate the open finding for future model updates/upgrades and risk informed applications, But this should be a licensee decision (as opposed to being a regulatory requirement) after considering the costs of the closure process against the benefits of the change based on both a risk and cost perspective. The following examples are cases where a licensee may consider leaving a finding open:

- Peer reviews are typically done against Capability Category (CC) II. For some applications, CC-1 is sufficient and the cost of upgrading the model to CC-II does not provide any significant risk insights
- There are cases where the NRC staff has not accepted the use of a model for low leakage RCP seals for specific applications, as the model was not specifically reviewed by the staff. This can lead to long standing open findings with no clear path to resolution if the licensee has a finding related to not including the model as it without credit, the model does not represent the as-built, as-operated plant, even though it can be shown that the risk impact of the credit is minimal.
- As additional models are developed (notably for external hazards), the state of the practice may lead to varying expert opinions on the appropriate assumptions, boundary conditions or methods to be used. Determining which opinion is the "best" can be difficult or impossible. In most cases, these differences may be insignificant to the results and/or risk insights and can be dealt with through appropriate sensitivity studies.

As RG 1.200 provides guidance for all formal risk informed LARs, regardless of the importance of the PRA model to the application, the impact and needed for finding closures is highly

Commenter	Specific Comments	NRC Resolution
	<p>dependent on the specific application that a licensee has implemented. Therefore, any regulatory expectations associated with finding closure should not be a part of RG 1.200 but should be considered in application specific guidance.</p>	
<p>18. PWR Owners Group</p>	<p>Regarding the first NRC question provided in the <i>Federal Register</i> notice: As noted above [in the previous PWR Owners Group comment], it is our position that closure of findings should not be required, therefore, there should not be any periodicity required. The important element is to ensure that the impact of open findings on the model and applications is evaluated and documented prior to using the model for a regulatory related application.</p>	<p>The NRC understands the comment; however, based on preceding comments (See NRC Resolution to comment 17) related to the first question in the <i>Federal Register</i> notice and the NRC's resolutions thereof, the NRC has not made any changes with respect to the periodicity for closure of peer review findings.</p>

Commenter	Specific Comments	NRC Resolution
19. PWR Owners Group	With its public comments on DG-13062, PWROG transmitted a revised version (Revision 2) of PWROG-19027-NP.	<p>The NRC reviewed PWROG-19027-NP, Revision 2 (available in ADAMS under accession number ML20213C660), with respect to the proposed staff positions provided in DG-1362 and notes the following observations:</p> <p>In regulatory position C.2.2.4 of DG-1362, the NRC provided the following clarification with respect to Section 3 of PWROG-19027-NP, Revision 1:</p> <p>“The description of Step 2 of the process in Section 3 of PWROG-19027-NP, Revision 1, includes four items. The NRC staff considers the first item to be an example of when a state-of-practice method is implemented in a new context whereupon the change to the PRA would be considered a PRA upgrade. However, the last three of the four items are not considered to be examples of when a state-of-practice method is implemented in a new context, because they could represent cases where an NDM is being used without being subjected to the NDM technical adequacy assessment peer review.”</p> <p>However, Section 3 of PWROG-19027-NP, Revision 2, has been revised to no longer include a step to determine whether a change to a PRA implements a state-of-practice method in a different context. Therefore, the NRC has removed the related clarification in regulatory position C.2.2.4 of RG 1.200, Revision 3.</p>