

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

Page	Comment	
1	<p><b>1.1 PURPOSE</b></p> <p>The purpose of this document is to describe industry’s guidance for characterizing and prioritizing regulatory and plant-identified actions and scheduling plant improvements at licensee facilities consistent with safety significance. Generic and plant-specific prioritization and plant-specific scheduling are two elements of the proposed approach for improving the process for managing emerging regulatory issues and addressing industry and regulatory concerns on the cumulative impact of additional regulatory requirements. This guidance <del>focuses on</del>applies to power reactors <del>only</del>. Fuel cycle facilities and material licensees will monitor and adjust the process, as necessary, based on lessons learned from the power reactor activities and the unique circumstances applicable to non-power reactor licensees.</p> <p><b>Comment [M1]:</b> Explain (give examples) how the process would prevent plant-identified actions or improvements with any safety significance would ever be scheduled after a security related item. It appears that security would always be delayed to the backstop.</p> <p><b>Comment [S2]:</b> Without this change, we will need concurrence from NMSS, FSME etc.</p>	<p>(M1) Comment will be addressed outside of guidance (e.g., tabletops and pilots).</p> <p>(S2) Paragraph modified to identify that Rev 0 applies to power reactors.</p>
1	<p>Safety impact/importance is the predominant factor in the assignment of scheduling priority. Following safety importance characterization (high, medium, low, very low, none), an overall characterization is performed that takes into account additional factors such as emergency planning, security, equipment reliability, and radiological protection to capture the safety significance of any issues in those areas that could not be captured under the safety impact. This overall characterization is factored into the plant’s scheduling process that takes into account other factors, such as availability of personnel and equipment.</p> <p><b>Comment [M3]:</b> It’s not clear how the safety/security interface of 10 CFR 73.58 is integrated into the process.</p> <p><b>Comment [F4]:</b> This should go under the licensee’s regular planning activities as opposed to RPI. In line with the discussions at the public meeting, RPI should focus on regulatory activities and not on the overall plant maintenance process. Requesting NRC approval for deferral for purposes other than safety may include other considerations for a specific regulatory action that the NRC has the purview of approving. However, comparing a low safety significance activity that reflects “other” factors such as personnel availability or power-generating priorities would shift the burden to the NRC in approving activities not necessarily meeting the initial purpose statement of this guidance in terms of focusing on safety first.</p>	<p>(M3) This compliments existing processes such as 73.58, it does not replace.</p>
1	<p>that could not be captured under the safety impact. This overall characterization is factored into the plant’s scheduling process that takes into account other factors, such as availability of personnel and equipment.</p> <p>The approach is risk-informed, in that generic and plant-specific risk information is an important input to the overall safety impact characterization process. Relevant sources of risk information can be considered, and both qualitative and quantitative</p> <p><b>Comment [F4]:</b> This should go under the licensee’s regular planning activities as opposed to RPI. In line with the discussions at the public meeting, RPI should focus on regulatory activities and not on the overall plant maintenance process. Requesting NRC approval for deferral for purposes other than safety may include other considerations for a specific regulatory action that the NRC has the purview of approving. However, comparing a low safety significance activity that reflects “other” factors such as personnel availability or power-generating priorities would shift the burden to the NRC in approving activities not necessarily meeting the initial purpose statement of this guidance in terms of focusing on safety first.</p>	<p>(F4) – No change made. The safety focused results from prioritization will be utilized in plant’s existing scheduling processes.</p>
1	<p>the initial steps of the process. PRA models can be used to inform the process. The ability to factor in the quantitative risk information will rely on the quality of PRA models. For the purposes of scheduling activities, this process provides an appropriate level of technical rigor. The approach is consistent with existing functions such as the reactor oversight process and the 10 CFR 50.59 process. This safety importance characterization is intended only for the purposes of scheduling.</p> <p><b>Comment [F5]:</b> While a requirement may not be appropriate, the proper use of PRA remains an issue. This is a lukewarm statement that appears to place PRA as an optional tool when both the tabletops and internal NRC insights indicate using PRA would provide the best vehicle for addressing the intent of this effort as well as the Commission’s communications on the subject. Without a clear and solid focus on enhancing the use of PRA, this guidance may not meet the full intent of the motivation behind RPI.</p> <p><b>Comment [F6]:</b> Sets a priori expectation of quality. Final decision on appropriate implementation quality and technical content of the guidance will be an NRC decision.</p> <p><b>Comment [M7]:</b> In addition the questions provided in RG 5.74 should be referenced for screening of planned and emergent activities or changes.</p>	<p>(F5) – The intent is to utilize information that is readily available.</p> <p>(F6) – Sentence retained.</p> <p>(M7) – See comment (M3).</p>
1	<ul style="list-style-type: none"> <li>Regulatory issues, and findings findings Note that an immediate action necessary for continued safe operation (e.g., to support NRC finding of adequate protection, or to restore compliance with a Technical Specification, or to resolve an environmental compliance issue with an adverse effect on public health and safety, or to remove a threat to personnel safety) should not use the prioritization process.</li> </ul> <p><b>Comment [S8]:</b> Inspection findings should be out of scope. Enhancements to ROP to better risk-inform ROP should rely on the ROP Feedback process as opposed to RPI.</p> <p><b>Comment [F9]:</b> As stated in the public meeting, adding inspection findings significantly expands the scope of the impacted framework and involvement from internal and external stakeholders. Inspection findings are already process through a risk-informed process, and the use of PRA to establish significance could be impacted by their inclusion in additional guidance with unintended consequences. This should be deleted.</p> <p><b>Comment [F10]:</b> This statement appears at the very end of the document. It needs to be stated upfront.</p>	<p>(S8, F9) – Revised as “actions taken to address inspection findings”. Additional guidance added on page 2. For the purposes of scheduling, the importance of a planned activity to address a finding can, and often will, be different from the original SDP significance (e.g., comp actions taken, considering</p>

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

		one of multiple actions taken).  (F10) – Comment incorporated. Statement included in “Additional guidelines on scope of prioritization process” page 2.
2	<ul style="list-style-type: none"> <li>Non-regulatory issues and activities, as identified by resource peaks in the business plan</li> </ul> <p>Thus, each plant may have a slightly different scope of actions to be prioritized. For</p> <p><i>regulatory activities, the first step is a review of the characterization performed by</i></p> <p><b>Comment [F11]:</b> Unclear whether this should be part of the scope. Once regulatory approval is requested for prioritization of activities under the authority of the NRC, it is unclear why non-safety items should be considered. If items without an increased safety benefit are being used to delay regulatory activities, this may be problematic for the NRC to approve.</p>	(F11) – Non-regulatory issues with potential safety impact will be included as part of prioritization. Bullet revised to make this clearer.
2	<p>Plants may also identify and characterize activities that have no direct regulatory nexus, but rather are identified by the plant to improve performance, reliability, or otherwise affect the design or operation of the facility.</p> <p><b>1.2 CONTENT OF THIS GUIDANCE DOCUMENT</b></p> <p><b>Comment [F12]:</b> Following above discussions, these items already fall under the purview of the licensee plant maintenance activities. Prioritizing the implementation of regulatory activities is intended to first and foremost focus on items of enhanced safety benefits. If the items covered under this statement fall within that category, then they are consistent with the intent of the guidance. If they are not, then it is unclear why it should be considered in a process that ultimately will result in a request for NRC approval.</p>	(F12) Added a sentence linking reliability to direct and indirect enhancement of nuclear safety.
3	<p><b>Figure 1-1</b></p> <p><b>Plant Process for Schedule Prioritization</b></p> <p><b>Comment [F13]:</b> If a plant-specific non-regulatory activity with safety implications has generic applications, is there a provision for the GAET to be informed by the IDP? If a determination made by the GAET can be better informed by IDP considerations (e.g., IDP identifies additional aspects that could impact the overall priority characterization that GAET did not consider and could have an impact for other site IDP considerations) is there an early feedback loop (currently, this feedback appears to occur at the end)?</p>	(F13) – Wording was added to address comment.
3	<p>The overall process addresses the following decision attributes:</p> <ul style="list-style-type: none"> <li>Safety – reactor and spent fuel pool safety; plant personnel safety (other than radiological exposure avoidance) is addressed here on an item-specific basis</li> </ul> <p><b>Comment [F14]:</b> Critical issue: the term “safety” is used in two ways in this document: public and worker safety, and issues pertaining to reactor and spent fuel pool safety. This could be perceived as separating attributes such as EP from safety importance. However, it is understood that the attribute needs to be identified in some manner. Suggest considering a different term (e.g., Reactor Core and Spent Fuel Pool Integrity).</p> <p><b>Comment [F15]:</b> May need a better definition. As currently written, the same statement can be applied to RP.</p>	(F14) – Referenced item was changed and moved it to “Other considerations”.
3	<ul style="list-style-type: none"> <li>Security – including cyber security</li> </ul> <p><b>Comment [F16]:</b> Needs a clear more full definition of scope. As a more general comment, document will need a glossary when finalized.</p>	(F16) – Bullet revised to identify both Physical Security and Cyber Security; note was added that security, EP, and RP are generally consistent with ROP usage.
3	<ul style="list-style-type: none"> <li>Emergency preparedness (EP)</li> </ul> <p><b>Comment [F17]:</b> Needs a high level definition in line with safety.</p>	(F17) – See above.
3	<ul style="list-style-type: none"> <li>Radiological protection (RP) – including exposure avoidance for plant personnel</li> </ul> <p><b>Comment [F18]:</b> See comment on Security, regarding definition.</p> <p><b>Comment [F19]:</b> Unless we are careful here, the output of this product may have components outside of</p>	(F18) – See above.

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

<p>3</p>	<ul style="list-style-type: none"> <li>radiological protection (RP) – including exposure avoidance for plant personnel</li> <li>Reliability as it pertains to improve plant safety.</li> <li>Aggregation to determine priority</li> <li>Scheduling</li> </ul>	<p><b>Comment [S19]:</b> Unless we are careful here, the output of this product may have components outside of the regulatory purview. Therefore, the process should focus on issues that have nexus to safety.</p> <p><b>Comment [M20]:</b> Reliability might also pertain to the function of Security or EP equipment.</p> <p><b>Comment [F21]:</b> One of the insights of the table tops is that this item is being added for issues that may have little safety benefits but are of importance for power-generating aspects. Placing the burden of approval on the NRC for such considerations deviates from the focus of the initiative. For non-regulatory actions with enhanced safety benefits, the existing attributes already cover safety considerations. Hence, it is not clear that this attribute is needed, and it may be detrimental to the overall clarity of the guidelines.</p> <p><b>Comment [AMZ22]:</b> Reliability in the sense it has a nexus to safety. Otherwise, plant initiatives can use this process to prioritize their work but those issues should not trump or defer regulatory issues. In other words, the regulatory issues should be prioritized on their merit and the merit of other regulatory issues. Their scheduling should then be done according to their priority. Other issues can use the flexibility in the schedule to prioritize and schedule their plant initiatives using their existing planning and scheduling processes.</p>	<p>(S19, F21) – Added sentence stating there could be direct and indirect impact on nuclear safety.</p> <p>(M20) – Agree; no change was made.</p>
<p>3</p>	<ul style="list-style-type: none"> <li>Aggregation to determine priority</li> <li>Scheduling</li> </ul>	<p><b>Comment [F21]:</b> One of the insights of the table tops is that this item is being added for issues that may have little safety benefits but are of importance for power-generating aspects. Placing the burden of approval on the NRC for such considerations deviates from the focus of the initiative. For non-regulatory actions with enhanced safety benefits, the existing attributes already cover safety considerations. Hence, it is not clear that this attribute is needed, and it may be detrimental to the overall clarity of the guidelines.</p> <p><b>Comment [AMZ22]:</b> Reliability in the sense it has a nexus to safety. Otherwise, plant initiatives can use this process to prioritize their work but those issues should not trump or defer regulatory issues. In other words, the regulatory issues should be prioritized on their merit and the merit of other regulatory issues. Their scheduling should then be done according to their priority. Other issues can use the flexibility in the schedule to prioritize and schedule their plant initiatives using their existing planning and scheduling processes.</p> <p><b>Comment [F23]:</b> Needs further definition of what Aggregation is at a high level here.</p>	<p>(AMZ22) – Added sentence stating there could be direct and indirect impact on nuclear safety.</p> <p>(F23) – Section numbers, where decision attributes are discussed, added.</p>
<p>4</p>	<p><b>2.0 GENERIC ASSESSMENT EXPERT TEAM (GAET), AND PLANT INTEGRATED DECISION-MAKING PANEL (IDP)</b></p> <p>The importance characterization for each category involves a generic component (for regulatory issues), and a plant-specific component (for plant-specific implementation of regulatory issues as well as plant-initiated modifications <u>that have safety, security, EP, and RP implications, etc.</u>).</p>		<p>Comment not incorporated; predetermination of implications of an issue is not necessary for the process, the process itself will determine the implications of the issue.</p>
<p>4</p>	<p>importance characterization. This importance is determined as one of the following:</p> <ul style="list-style-type: none"> <li>none (no impact)</li> <li>very low</li> <li>low</li> </ul>	<p><b>Comment [F24]:</b> Not clear why this category should exist for regulatory requirements while it may be applicable for non-regulatory issues. Consistent with risk-informed approaches, if there is a nexus to safety, it is possible that a very low determination may be made. However, a category that indicates “none” assumes a deterministic determination of no relationship to safety exists. Given the potential for misperception, suggest eliminating this or clarifying such a determination should not be made for regulatory activities if the NRC has issued a requirement that such activity be undertaken, especially if this term is intended to be applied for activities that will somehow not be pursued (as opposed to prioritized).</p>	<p>(F24) Comment not incorporated; the process allows for a determination that a topic (whether regulatory or plant initiated) has an importance characterization of “none” – this characterization is intended for use in prioritization for scheduling only.</p>

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

4	<p>These are intended to be <u>general, approximate</u> characterizations of importance in each category for the purpose of scheduling and sequencing of activities in a safety focused manner. They are not intended for any other use <u>such as cancelling projects</u>. The overall intent is for a practical, efficient and timely process that can be widely implemented after piloting.</p>	<p><b>Comment [F25]:</b> As stated above, none should not be a general category that could be applied subjectively without appropriate justification for regulatory activities or could be used for very low probability/high consequence events. It is unclear that such a category should exist in this case. Even for non-regulatory activities with safety nexus, there should be some definition/criteria as to what "none" can be applied to.</p> <p><b>Comment [F26]:</b> This is in line with above comment on the intent of "none".</p>	(F25, F26) – Per the criteria in each section, these determinations are as objective as possible; agree they are not for directing activity cancellation
4	<p>The GAET provides generic importance characterization information and attributes to the industry. Using this information where applicable, in conjunction with plant-specific evaluation performed by a plant SME, the plant IDP is responsible for making the plant-specific determinations of issue importance. The IDP is separately used to approve the final schedule developed on the basis of the prioritization. The following guidance is provided relative to the makeup of these panels.</p>	<p><b>Comment [F27]:</b> As part of the demonstration pilots, it would be expected that some clarity on format, content, and documentation on panel conducts would be gained such that additional practical guidance can be added here.</p>	(F27) – Practical guidance is already in the subsections that follow and will be adjusted as needed based on the pilots
5	<p>The GAET is comprised of industry subject-matter experts with relevant expertise to the issues being evaluated. The GAET will vary depending upon the issue. The <u>GAET members are expected to have the essential understanding of the issue safety nexus for their assigned issue, and familiarity with the prioritization process guidance and approach. For example, GAET for Cyber Security should consist of an individual who has multi-year experience in working on Cyber Security related projects as a licensee personal or consultant as well. Experience and qualifications which relate to their role in the GAET should be documented.</u></p> <p>The plant SMEs are knowledgeable in a particular technical discipline or disciplines</p>	<p><b>Comment [S28]:</b> We need more specificity here, especially if we plan to rely on the GAET's output into CER. Example words are suggested.</p> <p><b>Comment [F29]:</b> See prior comments. This may be informed by the demonstration pilots, and should definitely be an item for further guidance for all the attributes. Additional guidance on the conduct of IDP discussions was an insight obtained from the tabletops and this should apply to GAET as well. Added comments below indicate additional information that needs more guidance.</p>	(S28) – Additional guidance on GAET composition added.  (F29) – Need for additional guidance should be based on pilots; added write-up based on draft GAET guidance document.
5	<p>The plant SMEs are knowledgeable in a particular technical discipline or disciplines (e.g. NFPA 805 implementation or cyber security). They function as the lead presenter of the regulatory issue or activity to the IDP. <u>Experiences and qualifications which relate to their role in the IDP should be documented and maintained. For most regulatory issues, it is reasonable to expect that a generic assessment that is well documented isand available prior to a plant-specific assessment. If a generic assessment is available, this assessment should beis used by the SME as a key input into the plant-specific assessment along with relevant plant-specific information so that the experience of industry experts can be utilized in plant specific assessments.</u> The SME should provide his/her evaluation of Steps 1, 2 and 3A/3B and present the questions and proposed responses to the IDP. The</p>	<p>Additional wording added to address comment.</p>	
5	<p>specific documents are available to the IDP. The SME should work with the overall coordinator of the prioritization process to ensure that the results of the IDP deliberation are documented and records are maintained.</p>	<p><b>Comment [F30]:</b> Since these documents may be required for NRC audit/inspection, additional guidance may be needed.</p>	(F30) – Appropriate documentation mechanisms consistent with plant processes will be used.

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

5	<p>In general, <del>the minimum requirement is the inclusion of</del> there should be experts designated as members of the IDP with joint expertise in the following fields:</p> <ul style="list-style-type: none"> <li>plant operations (SRO qualified)</li> </ul>	<p><b>Comment [F31]:</b> It's unclear how an IDP could be successfully conducted without the participation of all fields. Even if an issue may not pertain to PRA modeling directly, risk-insights can be leveraged in a number of ways which may be missed if a PRA expert is not included because an a priori determination by non-PRA practitioners is made that PRA may not be needed. The impact for issues where PRA (or any other attribute) may have limited insights should be of limited burden and therefore there is no reason to exclude such participation.</p>	(F31) – Licensee expert panels in place are adequate.
6	<p>Members may be experts in more than one field; however, excessive reliance on any one member's judgment should be avoided. The IDP should be aware of the <b>benefits and limitations</b> of the plant-specific PRA and other risk analyses, and, where necessary, should receive training on the plant-specific PRA, its assumptions, and <b>limitations-appropriate implementation</b>. This training is for IDP familiarity and <b>the importance of making well-supported, technical assumptions whether quantitative or qualitative information is used</b>. <del>(i.e., it is not intended to make the IDP PRA “experts”)</del></p>	<p><b>Comment [F32]:</b> While the statement is valid, this is an effort where risk plays a central role. Hence, this comment could cause the impression that PRA information should not be taken seriously and should be avoided.</p>	(F32) – Recommended changes incorporated
6	<p>The IDP should be familiar with the technical approach and guidance for prioritization. In order to have a full understanding of the issue being characterized, all questions in each applicable step of the guidance should be answered, even if an initial “yes” response has already determined the outcome of that step.</p>	<p><b>Comment [F33]:</b> This will be an item of high interest for the demonstration pilots as the tabletops indicated familiarity with the guidance and intent of questions to be critical.</p>	(F33) – Acknowledged; no changes necessary
6	<p>A consensus process should be used for decision-making for both GAET and IDP. Differing opinions should be documented and resolved, if possible. However, a simple majority of the panel is sufficient for final decisions regarding priority of activities. The IDP should, <del>where possible</del>, apply objective decision criteria and minimize subjectivity.</p>		Recommended change incorporated.
6	<p><b>2.1 DOCUMENTATION</b> GAET: The GAET evaluation results and summary, including basis and description of important considerations/characteristics for plant-specific assessment by the SMEs and IDPs, will be documented and provided to the industry and the NRC for information. <del>Since the prioritization process addresses only scheduling of activities, 10 CFR 50 Appendix B does not apply. However, they should conform to a specific standard that is appropriate for its purposes.</del> The specific information that should be provided by the GAET includes:</p>	<p><b>Comment [F34]:</b> As part of this process, the NRC will consider what mechanisms for review and/or inspection may be needed to assess appropriate characterization of regulatory issues.</p>	(F34) – Acknowledged; no changes necessary.  Insertion not incorporated; retrieval addressed by adding: “Documentation will be maintained to facilitate any subsequent generic update/re-evaluation of the issue, as appropriate”.
7	<ul style="list-style-type: none"> <li>Related and publically available references such as             <ul style="list-style-type: none"> <li>Regulatory documents including Regulatory Analyses; Orders; Commission Papers (SECYs and associated staff requirements memoranda (SRMs)); NUREG and NUREG/CR reports; relevant</li> </ul> </li> </ul>	<p><b>Comment [M35]:</b> How are Classified, SGI, and OOU documentation controlled, handled, stored, referenced? Such as Non-publicly available Reguides, SFAQs, Reports.</p>	(M35) Words added to address comment.



NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

7	<p>• <del>Step 1, 2, and 3A/3B results and discussion</del> <u>Screening questions related to the determination of any impact (Step 1), assessment of more than minimal impact (Step 2), and qualitative/quantitative determination of safety importance level (Step 3A/3B)</u></p>	Comment incorporated.
7	<p>• Technical bases for conclusions regarding nuclear safety importance; the generic security threat assessment (if appropriate); and EP and RP issue significance characterization if available. It is expected that the effectiveness determinations for security, EP, and RP will be very plant-specific. Reliability importance assessment is expected to be almost completely plant-specific.</p> <p><b>Comment [M36]:</b> What is the technical basis for the generic threat assessment? How and Who performs this assessment? How is a generic assessment used to provide a very plant-specific effectiveness determination for security. Licensees do not have the clearance to do this effectively particularly on an on-going basis.</p> <p><b>Comment [M37]:</b> Security Effectiveness? What does that look like? Who does it?</p>	(M36, M37) – Comments have been addressed through revisions to section and flowchart.
7	<p>• Considerations and characteristics that may affect the plant-specific importance determination, particularly for safety. For example, the GAET may determine that based on reactor fleet considerations, the existing level of risk of an external initiator is <math>10^{-4}</math> to <math>10^{-5}</math> /yr/year CDF on average (Medium). If information is available, the GAET would convey what attributes could make the plant-specific assessment higher or lower.</p> <p><b>Formatted:</b> Superscript</p> <p><b>Formatted:</b> Superscript</p>	Change not incorporated.
7	<p>IDP: The prioritization process should be documented through plant procedures or other administrative controls. The decisions of the IDP, including a summary of the basis, should be documented and retained as plant records. In particular, the assessment of GAET <del>identified</del> <u>identifying</u> important issue considerations/characteristics and how they apply to the plant, and a basis for significant plant-specific departures from the general GAET ranking, should be noted. Since the prioritization process affects only scheduling of activities, 10 CFR 50 Appendix B does not apply. <u>However, they will meet a lesser standards that the licensees use internally</u> <u>However, other plant programs or procedures governing expert panels should be used and leveraged.</u></p>	<p>Revised to “GAET-identified important issues”.</p> <p>Following sentence added at end of paragraph:  “Individual licensees will determine an appropriate requirement for documentation to be maintained to facilitate periodic update/re-evaluation of the issue, similar to other plant programs or procedures governing the licensee’s expert panels.”</p>
8	<p>Documentation on the prioritization of each issue should be maintained onsite to assist in periodic review/update and to accommodate any NRC audits. The level of documentation should be such that a <u>sufficient basis is provided for knowledgeable, knowledgeable, individual could independent</u> review the <u>information to reach and come to</u> the same conclusion. The basis for any engineering judgment and the logic used in the determination should be documented <u>to the extent practicable and to a degree commensurate with the safety significance and complexity of the issue/activity</u>. The items considered by the GAET/SME/IDP must be clearly stated.</p> <p><b>Comment [F38]:</b> If it cannot be justified commensurate with the safety significance, then practicality should not be used as an alternate criteria.</p>	<p>Comments incorporated.</p> <p>(F38) – No change.</p>
8	<p><b>2.2 IMPORTANT CONSIDERATIONS (ATTRIBUTES) FOR OF THE PROCESS</b></p> <p>For each step in the process, there are important common elements that should be considered in the assessment, as follows:</p> <p><b>Comment [F39]:</b> These are critical attributes and should be more than just considerations.</p>	F39 – Comments incorporated.

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

<p>8</p>	<p>1. <u>Ensuring the issue and success criteria are well defined</u></p> <p>Although the goal of the overall process is to have clearly defined issues and success criteria <u>prior to evaluation by GAET or IDP</u>, the actual assessment may indicate that additional definition is appropriate. In addition, as the assessment progresses to subsequent steps, the actual conduct of the assessment may identify additional considerations not identified in the initial definition(s). <u>It is therefore critical that the specific issue and potential options for addressing it are appropriately defined and communicated.</u></p>	<p><b>Comment [F40]:</b> An important insight from the tabletops was that panel members need to ensure there is a common understanding on the issue and associated plant modification proposals. Open ended questions (e.g., is Cybersecurity as whole a safety significant program) and/or ill-defined plant modification options may not provide sufficient definition for efficient decision-making. This item should be questioned at the beginning of any discussion.</p>	<p>(F40) – Comments incorporated.</p>
<p>9</p>	<p>3. <u>Considering uncertainty</u></p> <p>Although the characterization and importance matrix in Table 3-1) does not require quantitative risk measures, the matrix is based on relative risk and is consistent with the Significance Determination Process (SDP) process of <u>green</u>, white, yellow and red. Thus, each of the entries on current risk differs by about a factor of ten. This should address most concerns on uncertainty for the context of the prioritization process. <u>Therefore, both the GAET and IDP reviews need to be aware of specific issues, such as external events, for which uncertainty considerations may produce risk estimates with multiple orders of magnitude.</u></p>	<p><b>Comment [M41]:</b> Label the tables</p> <p><b>Comment [M42]:</b> A Security finding might be green, but potentially involve target sets. How does this lineup with the significance. SDP might not always be the best method for security. How are items that kick out of the SDP worked?</p>	<p>(F41, F42) – Comments addressed through revised Security flowchart.</p>
<p>9</p>	<p>4. <u>Considering the need for additional information</u></p> <p><u>There is the potential that for the assessment of some issues more timely or recent information than originally provided by the GAET will be needed, for example, external flooding at some sites. For such issues, existing NRC-industry practices, including public meetings and interactions between the industry and NRC subject-matter experts, may provide a source of additional information. The decision to pursue additional information should occur sufficiently early in this process such that performing this action does not become the driving factor in delaying a risk-informed prioritization decision and, ultimately, the timely implementation of a regulatory activity.</u></p>	<p><b>Comment [F43]:</b> There should be a consideration for timeliness in addressing regulatory actions that may be impacted by this item. This should be identified early, such that requesting/producing additional information for prioritization characterization does not become a critical path by itself. Leveraging additional information/interactions to further refine prioritization assessments with NRC should not be pursued as alternative to making a decision with the available information.</p>	<p>(F43) – Comments incorporated.</p>
<p>9</p>	<p>5. <u>Evaluating the overall nature of the risk impact of Using caution in identifying how, and how much, a potential action impacts risk</u></p> <p><u>The specific intended function of implementation, as well as other correlated or indirect effects, should be considered (e.g., FLEX provides mitigation for more than external hazards even though that is its fundamental intended purpose).</u></p> <p>Beneficial and adverse effects should be considered (e.g., replacing a small pump with a large pump could reduce the available margin of an emergency diesel generator (EDG); closing and depowering pressurizer power/pilot operated relief valves (PORV) block valves to prevent spurious operation could reduce effectiveness of feed and bleed).</p>	<p><b>Comment [F44]:</b> This seems to belong more to item 6 (FLEX is also used as an example). In fact, there are two important separate issues that appear to be conjoined here. The suggested revision is intended to address this.</p> <p><b>Comment [M45]:</b> This is another place where the Safety/Security interface is relevant</p>	<p>(F44) – Comments incorporated.</p> <p>(M45) – Acknowledged; no change necessary.</p>

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

<p>10</p>	<p>6. Identifying the overall extent of the impact of an individual issue when considering commonalities with other issues</p> <p>The specific intended function of implementation, as well as other correlated or indirect effects, should be considered. In other words, one specific plant modification could impact the specific activity under consideration as well as multiple other separate plant modifications. As discussed above, this could include both positive as well as negative impacts that may not be immediately evident when considered individually. For example, implementation of FLEX impacts the potential benefits of future changes to the station blackout rule. The resolution of other issues could have a beneficial or adverse impact on the priority of an issue. Guidance on a pairwise comparison is included to support both a peer check on issue rankings as well as for support in identifying any commonalities. For example, implementation of FLEX impacts the potential benefits of future changes to the station blackout rule.</p> <p>It is critical to consider and identify these issues throughout the process in order to support an aggregation that fully accounts for relevant insights in an integrated manner.</p>	<p>Comment [F46]: At this stage, there isn't significant guidance in this document to support this statement. However, it is understood that this would be developed from additional insights from the demonstration pilots.</p> <p>Comment [M47]: Although, this provides for what should happen, it should provide a method or reference to another section of how this is done.</p>	<p>(F46) – Comments incorporated.</p>
<p>10</p>	<p>2.3 TYPES OF MODELS AND EVALUATION TOOLS</p> <p>The models and evaluation tools available or achievable are extensive, and the philosophy for the prioritization process is to use available sources of risk information, with understanding of their benefits and limitations. The appropriate model/tool will depend on the issue. For the prioritization process, formal methods to document PRA technical adequacy are not needed, since the process is used for scheduling purposes only and since effective backstops should be in place to prevent excessive delays to the dispositioning of regulatory issues, formal methods to document PRA technical adequacy are not needed. However, use of PRAs that meet the Quality Standards are beneficial in substantiating any request for exemptions from regulated regulatory action due dates. In this context, indicating the level of quality of the tool used for decision-making can provide additional confidence on the prioritization characterization of an issue. In addition, choosing a less formal, qualitative approach when more appropriate tools are available should be avoided.</p> <p>Models/tools include:</p>	<p>Comment [F48]: If the PRA benefits are immediately identifiable, this should be also considered. In other words, qualitative insights should not always take precedence when considering the best available information for a risk-informed decision.</p> <p>Comment [S49]: Licensees who have high-quality PRAs should be encouraged to use them.</p> <p>Comment [F50]: In tandem with the above comment, the guidance needs to make clear that, while PRA modeling is not a requirement or the ultimate goal, this guidance is not intended to encourage more subjective, qualitative discussions in lieu of using readily available, higher quality tools.</p>	<p>(F47) – Comments incorporated.</p>
<p>11</p>	<p>2.4 EVALUATION</p> <p>The importance characterization starts with a specific issue (either current or future) and associated issue definition and success criteria. This is a precondition for starting the evaluation. In addition, available information is collected, including NRC and Industry information. Available cost-benefit analyses and SAMA-like analyses are also collected, as available.</p>	<p>Comment [F51]: For the purposes of RPI, all issues should be considered current. While characteristics of this process may be used to address CER issues, the intent of RPI should not be to perform a second check of the appropriateness of new NRC decisions. Instead, the focus should be on the risk-informed prioritization such that safety enhancements are optimized through this process.</p>	<p>(F51) – Deleted “(either current or future)”.</p>
<p>11</p>	<p>In addition the effectiveness of existing or planned programs and processes to address the underlying issue (e.g., reactor oversight process (ROP), mitigating system performance index (MSPI) program, maintenance rule, fire-protection programs) should be considered. The industry and the NRC may have programs and processes that either could directly, or with changes, address the underlying issue and eliminate the desirability of developing new programs or conducting new analyses. To be effective, such programs and processes would be expected to provide the information and actions needed to address the underlying issue.</p>	<p>Comment [F52]: This appears to address future issues, which is under the purview of the NRC. While these considerations could be gathered and submitted for NRC review under the appropriate process, it is unclear how it would be used under the licensee's purview. In this respect, strict consideration of existing processes should not be used as input for prioritization purposes (e.g., an issue should not be deemed low or very low, because an existing process such as ROP may identify safety implications afterwards). Instead, a particular plant modification may be considered that has the added benefit of improving performance trending programs such as SDP/MSPI.</p>	<p>(F52) – Industry and/or NRC programs (e.g., guidance, response options) can provide information that will impact the evaluation and should be considered.</p>



NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

12	<p>Further an alternate, smarter action may be identified during the evaluation such that either the cost would be reduced and/or the risk further reduced compared to using the offered success criteria.</p>	<p><b>Comment [M53]:</b> This section is not clear. In addition, it appears to indicate that RPI may be used to offer alternatives as opposed to rescheduling. We must fully understand the purpose of this paragraph and get it reworded. This section may be a good place to discuss further development of PRAs to support proposing alternatives or recommending exemption from a requirement.</p>	(F53) – Edited for clarity.
13	<p>The characteristics of the issue will determine the most efficient way. Considerations include complexity of an issue(s) and the potential desire to have refined analyses in advance of the GAET/IDP deliberations.</p>	<p><b>Comment [M54]:</b> Process?</p>	(M54) – Comment not incorporated.
13	<ul style="list-style-type: none"> <li>For a potential plant change identified to address a regulatory requirement or non-regulatory plant initiated action, treat the assessment as if the plant change could impact safety/risk. (i.e., an a priori bias on the overall characterization of the issue should be avoided). (This could include a change aimed at reducing risk [e.g., FLEX] or a change aimed at preventing or minimizing a potential increase in risk due to a future increase in hazard level or frequency [e.g., cyberattacks]).</li> <li>For the conduct of an evaluation, treat the assessment as if the evaluation</li> </ul>	<p><b>Comment [M55]:</b> Safety/Security interface: Changes to hardware, procedures, staffing can affect the fidelity/capability to respond to a physical attack.</p> <p><b>Comment [F56]:</b> It is not entirely clear what the guidance is addressing here (suggested edits are provided assuming the guidance intends to avoid bias in the initial steps of the process).</p>	<p>(M55) – Acknowledged; no change necessary.</p> <p>(F56) – Suggested edits incorporated in part.</p>
13	<ul style="list-style-type: none"> <li>For the conduct of an evaluation, treat the assessment as if the evaluation could identify plant changes, which if implemented, could impact safety/risk. (In the cost evaluation, note that both evaluation costs and potential implementation costs will need to be estimated.)</li> </ul> <p>Note: Although the expectation is that an issue and associated definition entering this process is intended to reduce risk/improve safety/security/EP/RP/reliability, there is a potential for the SC to be adverse to risk/safety/security/EP/RP/reliability. The process addresses this possibility. If an adverse impact is identified, there are alternative paths:</p> <ul style="list-style-type: none"> <li>Continue using the process and address the adverse impact in the overall assessment of benefit and cost.</li> </ul>	<p><b>Comment [F56]:</b> It is not entirely clear what the guidance is addressing here (suggested edits are provided assuming the guidance intends to avoid bias in the initial steps of the process).</p> <p><b>Comment [M57]:</b> When evaluating difference options for resolution of an issue, it's not clear how the options are considered. Are the options developed first and each option run through for evaluation or is the issue run through with the option that the GSET or IDP has determined would be the best option. This is particularly perplexing when there is no identified negative impact identified for several options. How is all this integrated into the best overall option? Please provide clarification.</p> <p><b>Comment [F58]:</b> It is not clear how this guidance will be interpreted in some cases. This could be applied to regulatory actions which may require some form of reassessment (e.g., Fukushima lessons-learned external events reevaluations). While, in some cases, it may be possible to bound the potential range of impacts based on previously developed information; some studies may be required because new information has come to light and/or the effect of new insights may need to be factored in (as in the Fukushima accident). In such cases, performing an a priori assessment on the importance of the evaluation itself could lead to an immature preemption of the insights that the actual analysis can provide. This should be factored in the guidance.</p> <p><b>Comment [F59]:</b> This was identified in Section 2.2 already.</p>	<p>(M57) – It is not a problem-solving decision making process, but a schedule prioritization process; no change.</p> <p>(F58) – This was assessed to be sufficient guidance during the tabletops and pilots.</p> <p>(F59) – No change.</p> <p>Incorporated “the adverse impact” change.</p>
13	<ul style="list-style-type: none"> <li>Develop and implement a plan for interacting with the NRC (regardless of whether the SC was established by the NRC or the industry). A “plan” here means the approach to communicating with the NRC including, as appropriate, a recommended course of action.</li> </ul>	<p><b>Comment [F60]:</b> Is this different than the rest of the guidance for going through the prioritization process? I.e., is this intended to be an early interaction prior to the full prioritization? This is not clear.</p> <p><b>Comment [F61]:</b> This should follow the usual processes for addressing issues. If one of the insights of a plant modification is the identification of an unanalyzed condition, nothing in this guidance should preempt NRC reporting requirements.</p>	(F60, F61) Revised to clarify that “normal processes and procedures” would be used for NRC interactions.

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

14	<p><b>2.5 INSUFFICIENT CONFIDENCE</b></p> <p>This is a sequential screening process. Thus, at any step in the process, except Step 3B, the GAET or plant can continue to the next step if there is insufficient confidence in the assessment result for the previous step. Alternatively, the GAET/plant may develop a plan to gain the information needed to have sufficient confidence. The plan could include interaction with the NRC, conduct of analyses, etc. This applies on a plant-specific basis also. The plant IDP may advise the performance of additional analyses to improve confidence in the outcome of any step. Sufficient confidence exists when the GAET/IDP concludes that the safety importance and/or priority outcome would not change if additional information was obtained or developed.</p>	<p><b>Comment [M62]:</b> Isn't this going to be the case for almost Security Related issue?</p> <p><b>Comment [F63]:</b> This should be balanced by timeliness issues as identified in prior comments.</p>	<p>(M62) – Pilot did not indicate that this was an issue</p> <p>(F63) – Agreed. No change needed.</p>
15	<p><b>Figure 3-1</b></p> <p>Progressive Screening and Evaluation – Safety Importance (Generic) –</p>	<p><b>Comment [F64]:</b> This figure includes an option to drop an issue (including a regulatory issue). As currently discussed, there isn't an envisioned mechanism by which an NRC requirement would be voluntarily dropped by an external industry panel. Even if information exists that support the assessment that there is absolutely no nexus to safety enhancement, this should be discussed with the NRC through appropriate processes.</p>	<p>(F64) – Chart revised and added to document.</p>
16	<p><b>Figure 3-2</b></p> <p>Progressive Screening and Evaluation – Safety Importance (Plant-Specific) –</p>	<p><b>Comment [F65]:</b> As identified in the previous figure, the same comment on drop option applies here.</p>	<p>(F65) – Chart revised and added to document.</p>
17	<p><del>The safety importance characterization process is intended to use risk information, but primarily in a qualitative fashion.</del></p> <p>The process is a progressive screening and evaluation, and includes three basic steps: 1) a series of screening questions to address the “no safety impact” step; 2) a</p>	<p><b>Comment [F66]:</b> See prior comments on qualitative focus of the overall issue. While it is understood that not all issues are amenable to detailed, quantitative PRA modeling, this statement could be interpreted as dis-incentivizing the use of already existing, high quality PRA insights. Without modification, this sentence may not meet the original intent of Commission statements on the focus of the RPI efforts. Suggest deletion and/or appropriate discussion of this issue.</p>	<p>(F66) – Sentence revised to state “The safety importance characterization process is intended to use available risk information.”</p>
20	<p>In answering this question, the first step is to identify the risk-significant accident initiators that have been evaluated that could be affected by the proposed activity. For regulatory-initiated actions, this should have been determined on a generic basis by the NRC. Then a determination should be made as to whether the frequency of these accident initiators occurring would be more than minimally decreased. Accident initiators can be divided into categories, whether for at power or low power shutdown conditions, for example:</p>	<p><b>Comment [M67]:</b> How is the equivalent to a risk-significant accident initiator evaluated, particularly when caused by a deliberate actions of sabotage, particularly when the probability or frequency has to be assumed to be 1 and achieving high assurance that it can't occur be the equivalent to zero.</p>	<p>(M67) – Security impact is addressed in Security attribute.</p>
20	<p><b>Risk significance:</b> Risk Significance should be based on matrix benchmarks in Table 3-1, which are based on SDP risk significance. Using readily available information, accident initiators that are not risk-significant, i.e., minimal or less than minimal, generally are those:</p>	<p><b>Comment [S68]:</b> In estimating risk significance for an issue, the definition of the issue become important. Also, can some issues be broken down to pieces in estimating risk significance? For example, if dealing with a regulatory issue entails implementing two plant changes, how would you assess the risk significance of the issue (the two changes)?</p>	<p>(S68) – Wording additions made in Section 2.4.</p>
21	<ul style="list-style-type: none"> <li>contributing less than 1% of total CDF/LERF (consistent with RG 1.174), OR</li> <li>contributing to a less than 10% change in frequency (as this is insignificant and consistent with 50.59 guidance)</li> </ul> <p>If the proposed activity would not meet one of the above criteria, the risk significance of an issue is considered to involve a more than a minimal assessment. If information is not readily available, the risk significance should be determined by comparison to other issues evaluated. While formal guidance on uncertainty treatment is not provided here, the impact on the determination of a less than minimal assessment should be considered.</p>	<p><b>Comment [F69]:</b> To be consistent with 50.59 guidance in NEI 96-07, this should apply to more than minimal term only. The term “insignificant” is used in the foreword of NEI9-07 in a more general sense “Moreover, substantial resources were expended each year by licensees to process and submit to NRC lengthy evaluations for numerous insignificant changes.”</p> <p><b>Comment [F70]:</b> Suggest adding a clearly defined statement as this section leaves this interpretation open.</p>	<p>(F69) – Change incorporated.</p> <p>(F70) – Change incorporated.</p>

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

<p>22</p>	<p>• _____ The calculated change in frequency in total is less than 10%.</p> <p><u>Example 3:</u></p> <p><u>The change in frequency of occurrence is considered more than minimal if ANY of the following criteria are met:</u></p> <p>_____ There is known direct correlation between the issue and the frequency.</p> <p>OR</p> <p><u>The calculated change in frequency is more than 10%, OR</u></p> <p>• _____</p>	<p><b>Comment [S71]:</b> It is good to give an example of situations which can be used to determine that there is a more than minimal increase. See suggestion:</p> <p><b>Formatted:</b> No bullets or numbering</p>	<p>(S71) – No change.</p>
<p>24</p>	<p><b>Question 2: Does the activity result in more than a minimal improvement in the availability, reliability or capability of SSCs or personnel relied upon to mitigate a risk-significant transient, accident or natural hazard?</b></p> <p><del>[This includes the reactivity control function, so anticipated transients without scram (ATWS) is addressed here, as ATWS is not an accident initiator, but instead an accident sequence.]</del> In answering this question, the first step is to identify the risk significant SSCs and human actions that have been evaluated that could be affected by the proposed activity. <u>To answer this question the following considerations should be applied:</u></p> <ul style="list-style-type: none"> <li>For regulatory-initiated actions, this may have been determined on a generic basis by the NRC. <del>If not, guidance herein will develop this information:</del></li> <li><del>If guidance is not immediately available. Then,</del> a determination should be made as to whether availability, reliability, or capability of SSCs or personnel relied upon to mitigate a risk-significant transient, accident or natural hazard would be more than minimally decreased.</li> </ul>	<p><b>Comment [F72]:</b> Not sure why this is included here. Is there a completeness issue with regards to how the question is phrased?</p>	<p>(F72) No change; making the point that ATWS is <u>not</u> an initiator.</p> <p>Changes to bulleted items not incorporated. Steps are not necessarily mutually exclusive.</p>
<p>25</p>	<p><u>If the proposed activity would not meet one of the above criteria, the risk significance of SSCs/human actions are considered to involve a more than a minimal assessment.</u> If information is not readily available, the risk significance should be determined by comparison to other issues evaluated.</p>	<p>Similar wording incorporated.</p>	
<p>25</p>	<p><u>The term "risk-significant" refers to the structures, systems and components (SSCs) performing risk-significant functions, including nonsafety-related and safety-related SSCs and human performance.</u> NUMARC 93-01 (Reference 3) provides specific guidance on risk-significant <u>criteria</u>. In determining whether there is more than a minimal decrease, the first step is to determine what SSCs and human actions are affected by the proposed activity. Next, the effects of the proposed activity should be determined. This evaluation should include both direct and indirect effects.</p>	<p>Change incorporated.</p>	

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”



26	<p><u>Engineering insights as well as statistical insights can be used to determine whether a proposed activity influences the likelihood of failure. For example, if research, experiments, operating experience, or simple rules of physics show a direct correlation between the proposed activity and the likelihood of failure (e.g., impact of strengthening of strengthening the anchorage of a pump on seismic fragility of a pump), then it may be concluded that the proposed activity has significant effect on the likelihood of failure. In the absence of such known correlations, a</u> proposed activity is considered to have a negligible effect on the likelihood of failure when a change in likelihood is so small or the uncertainties in determining whether a change in likelihood has occurred are such that it cannot be reasonably concluded that the likelihood has actually changed (i.e., there is no clear trend toward decreasing the likelihood). A proposed activity that has a negligible effect satisfies the minimal increase standard.</p>	<p><b>Comment [S73]:</b> Document should provide clear guidance to screen in as well as to screen out., Note example shown).</p>	(S73) – Referred to NEI 96-07; suggested wording and example here does not seem to fit.
27	<p><u>If the proposed activity would not meet one of the above criteria, the risk significance of accident sequences are considered to involve a more than a minimal assessment.</u> For example, a generic regulatory activity is proposed that would address <u>external flooding seismic</u> issues. The site characteristics as well as plant-specific PRA are such that the plant is not susceptible to major <u>flooding seismic</u> concerns. The flooding hazard is very low and the plant design sufficiently robust such that the estimated CDF from <u>external flooding seismic contribution</u> is well below 1E-6/year and likewise LERF is below 1E-7/year. Therefore, any further decrease in <u>external flooding seismic risk</u> would be just a fraction of the existing risk level and would be less than minimal. It is further expected that all U.S. plants have total CDF (including unquantified external hazards) of 1E-4/year or less. If an activity addresses the risks or sequences amounting to only 1% of the</p>	<p><b>Comment [F74]:</b> Suggest using an example that is more amenable to CDF/LERF determination given the level of implementation of seismic PRAs. External flooding hazard has not yet been developed sufficiently to address state of knowledge and other issues in the same way that seismic has with PSHA and SSHAC. This could be licensees the impression that external flooding is immediately amenable to implementation in RPI without the insights on the current challenges to doing so.</p>	(F74) – Changed to seismic.
28	<p><u>with the 10 CFR 50.59 guidance in NEI 96-07 (Reference 1).</u> It is widely acknowledged that there are very large and increasing uncertainties going from the Level 1 portion of a PRA study (core damage frequency estimation) to the Level 2 (containment performance) to the Level 3 (offsite dose consequences). <u>A 10% increase in calculated consequence, given the large uncertainties in severe accident dose analysis, is such that it could not be reasonably concluded that the consequences have actually changed.</u> Small changes in inputs and assumptions could easily have more of an effect than a calculated change of 10% change in offsite dose from a severe accident sequence.</p>	<p><b>Comment [F75]:</b> This should be re-phrased, large uncertainties should not be used as a justification for risk significant determination.  <b>Comment [F76]:</b> In that case, it would appear that a discussion of the inputs and assumptions may be needed to justify the 10% threshold. I.e., does the issue impact those inputs and assumptions?</p>	(F75, F76) – Comments incorporated.
28	<p><b>Question 4: Does the activity result in more than a minimal improvement in the capability of a fission product barrier?</b></p>	<p><b>Comment [F77]:</b> As identified in the tabletops, there is the potential for significant overlap between Question 3 and 4. Maybe this should be addressed here.</p>	(F77) – Comment not incorporated.
29	<p><u>This evaluation focuses on the fission product barriers, fuel cladding, reactor</u>  <b>Question 5: Does the Activity Result in more than a minimal improvement in the defense in depth capability or safety margin?</b>          Regulatory Guide 1.174 (Reference 2) provides guidance.</p>	<p><b>Comment [F78]:</b> Since significant text was added from NEI 96-07 on the above questions, this question should also be fleshed out with relevant text from RG1.174.</p>	(F78) – This was left as is; were previously asked by NRC staff to leave examples of DID out because we might be misleading the user to think the list was complete.
30	<p><u>Note: Step 3B can be used in lieu of Step 3A if appropriate quantitative information is readily available or can be developed.</u></p>	<p><b>Comment [F79]:</b> In such case, the flowchart should be modified to reflect the following decision point: what is the best available information to make a decision for a specific issue. If a quantitative approach is readily available or can be reasonably developed, the process should move on to step 3b rather than linger on step 3a and spend additional resources that could be better utilized by using PRA insights for example.</p>	(F79) – Comment incorporated; changes made to 3B.

NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

33	<p>Spent Fuel Pool</p> <p><u>Low Power and Shutdown</u></p>	<p><b>Comment [F80]:</b> Should be added. Discussed in an example in NUMARC 93-01 guidance that could be useful in this guidance as well (underlined added):</p> <p>An SSC could be risk significant for one failure mode and non-risk significant for others. An example of an SSC that is risk significant for one failure mode and non-risk significant for another is as follows: Blowdown valves on steam generators perform a safety function to close on isolation. However, the open position function is to maintain water chemistry which is a nonsafety function. Additionally, many SSCs that are functionally important in modes other than power operation, such as shutdown, may be identified by some normally employed analysis methods (e.g., Engineering Analysis, IPE, PRA, etc.). These should be determined by an assessment of their functional importance in other modes and a review of events and failures that have occurred during these modes.</p>	(F80) – Comment incorporated; added LPSD.
33	<p><u>If the proposed activity would not meet one of the above criteria, the risk significance is considered to involve a more than a minimal assessment. If information is not readily available, the risk significance should be determined by comparison to other issues evaluated.</u></p>		Similar change incorporated.
38	<p><b>4.0 IMPORTANCE CHARACTERIZATION OF OTHER CATEGORIES</b></p> <p>Following safety importance characterization (high, medium, low, very low, none), an overall characterization is performed that takes into account additional factors such as emergency planning, security, and radiological protection. <u>The primary objective of this characterization is to capture the significance of the issue that was not already captured under the factors that have already been considered under safety.</u></p>	<p><b>Comment [F81]:</b> A higher level issue that needs to be addressed: in the IDP discussions at the tabletop, relationship of individual issues with multiple attributes were discussed regardless how an individual issue was characterized/binning. For example, RCP seal LOCA examples were considered for EP, RP, Security as well as for "Safety". This section focuses more at binning the issues upfront. How can the guidance ensure the integrated look is performed regardless of the binning?</p> <p><b>Comment [S82]:</b> How do you prevent double counting of the safety aspects of these issues? Does the proposed statement make sense?</p>	(F81) Determined that binning is not an outcome or objective; process ensures that a range of attributes are considered.  (S82) – Similar wording incorporated.
38	<p><b>Step 1 (Screening for any impact)</b></p> <p>Complete the flowchart in Figure 4.1-1 and, if appropriate, Figure 4.1-2 to determine the current <u>threat</u> associated with the issue. Note that "risk significant (safety) function" is used in the context of the Maintenance Rule, i.e., as defined in guidance documents such as NUMARC 93-01 (Reference 3).</p>	<p><b>Comment [M83]:</b> Exposure to design basis threat. Current threat could be interpreted as site specific imminent threat, which would be only applicable immediately prior to an attack. Potential impact of not addressing the issue under a threat environment will likely result in a better assessment. Ask the question if exploited, what's the potential results.</p>	(M83) – Comment addressed; "threat" wording removed.
38	<p>The IDP should first assess the issue assuming there is no target set impact. Then, a Safeguards qualified IDP should determine if there is an adverse impact on a target set function (noted on Figures 4.1-1 and 4.1-2 with a dashed line). If there is, determine whether it would result in fuel <u>damage</u> and the level of confidence in that determination. If no fuel damage, then determinations from the initial IDP assessment are confirmed. If the current threat associated with the issue is anything other than "None," continue to Step 2.</p>	<p><b>Comment [M84]:</b> Not just CDF but fuel pool impact. There is no deterministic cause and effect to evaluate the delay of security issues. PRA doesn't provide a probability, so risk needs to be based on the potential result of the issue.</p>	(M84) – Comment addressed through revised Security flowchart.
39	<p><b>Figure 4.1-1</b></p> <p><b>Security Issue Importance Determination – Step 1</b></p> 	<p><b>Comment [M85]:</b> Where is the "sufficient confidence" which seem even more applicable to security, blocks that are incorporated into the safety flowcharts.</p> <p><b>Comment [M86]:</b> It appears that detection and assessment issues would always screen out low.</p> <p><b>Comment [M87]:</b> Is there a more detailed flowchart inside the dashed line box?</p> <p>Field Code Changed</p>	(M85, M86, M87) – See above.



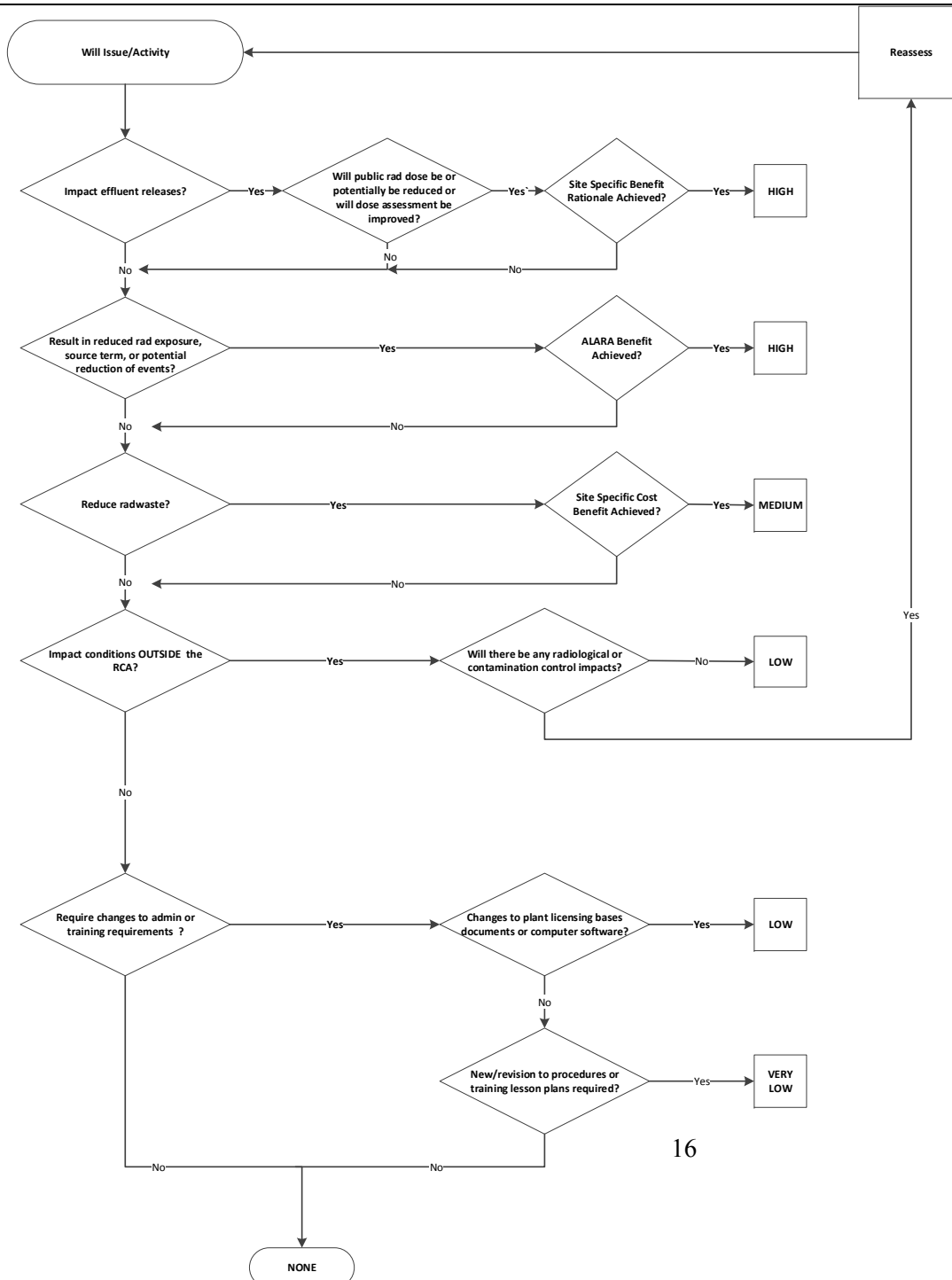
NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

40	<p align="center"><b>Figure 4.1-2</b></p> <p align="center"><b>Cyber Security Importance Determination – Step 1</b></p> 	<p><b>Comment [M88]:</b> It appears that a Cyber issue with the potential to make the external or internal communication system not function properly goes to none. That wouldn't be appropriate.</p>	(M88) – See above.
40	<p><b>Step 2 (Determine issue's security importance)</b></p> <p>See Section 4.4.</p> <ul style="list-style-type: none"> <li>• It is not clear in the document that measures required for adequate protection are not to undergo the process described in the document.</li> <li>• The construct for security is based on the construct developed for safety, which utilizes a PRA approach. However, the risk associated with security is a conditional risk (e.g., the probability of an attack is equal to one), as the likelihood of an initiating event is unknown and not random. Consideration should be given to use a different approach for assessing risk for security measures.             <ul style="list-style-type: none"> <li>○ It is difficult to say if a security measure will impact a target. Could is probably a better word than would.</li> <li>○ When conditional risk is assessed at a facility for security, the typical PRA approach is not used. In general, path analysis is used, which looks at several layers: detection, assessment, response/interdiction. The timelines help to establish security margins. Early detection and delay features tend to improve the conditional risk.</li> </ul> </li> <li>• When measures are considered to establish a ranking of priorities, safety measures can be prioritized at a level 1. However, security measures can be scored no higher than a level 2. It is not clear that the restriction is appropriate.</li> <li>• The document should include a discussion of evaluating all measures under consideration for their impacts on safety, security, emergency response, and radiological protection. Addressing these impacts is critical to the overall protection of the public health and safety.</li> <li>• A statement should be provided that this methodology only applies to new requirements and industry initiatives, and not to existing requirements that are already implemented at the facility.</li> <li>• It would be helpful to see the methodology applied to security measures. This would allow the methodology to be assessed based on how it is applied, rather than in an abstract form. In addition, the approach should be demonstrated in an exercise that shows how security/safety/emergency response/radiological protection can be assessed in combination to achieve a overall risk-informed prioritization.</li> </ul>	<p><b>Comment [AMZ89]:</b> Comments from Security.</p>	Comment addressed; section revised.
43	<p align="center"><b>Figure 4.2-1</b></p> <p align="center"><b>EP Issue Importance Determination – Step 1</b></p> 	<p><b>Comment [AMZ90]:</b> New EP Flow charts were developed. This is no longer up to date.</p>	(AMZ90) – Acknowledged.
43	<p>Operating experience, as used in Figure 4.2-1 includes new information, insights and lessons learned from drills, exercises or actual events at U.S. or foreign nuclear facilities. The decision to include new information or lessons from foreign facilities or sources should be made through a determination of whether the non-US</p>	<p><b>Comment [F91]:</b> Operating experience is being used in a wider context that traditionally utilized. This is confusing. Suggest defining a different term that encompasses the true intent: insights from either OE (actual use of the term) or new information.</p>	(F91) – Paragraph deleted with revision of EP flowchart.

<p>44</p>	<p><b><u>4.3 Radiation Protection</u></b></p> <p><u>RP importance characterization includes two basic steps: 1) a flowchart series of screening questions to address the “no impact” step; and 2) use of qualitative effectiveness estimates to assign high, medium, low, or very low importance to activities that do not screen out in step 1. For step 1, the flowchart in Figure 4.3-1 is used. For step 2, the overall RP importance is concluded based on a matrix, provided in Table 4-1.</u></p> <p><b><u>Step 1 (Screening for any impact)</u></b></p> <p><u>Complete the flowchart in Figure 4.3-1 to determine the current significance (benefit) associated with the issue. If the current significance (benefit) associated with the issue is anything other than “None” or “Reassess,” continue to step 2.</u></p> <p><u>Note that the decision diamonds entitled “Cost Benefit Achieved” represent the actions taken to assess the projected benefit (e.g., dose savings) achieved by the proposed issue vs. the projected level of effort required, including monetary impact. Site specific monetary values should be used during this assessment.</u></p> <p><u>The first decision diamond addresses the issue of “Public Dose,” and could include actions such as:</u></p> <ul style="list-style-type: none"> <li><u>• System modifications improving effluent treatments</u></li> <li><u>• Improved radiation effluent monitoring capabilities (e.g., detector efficiencies)</u></li> <li><u>• Improved sampling techniques (e.g., C-14 sampling vs. branching calculations)</u></li> </ul> <p><u>The second decision diamond addresses the issue of “Occupational Exposure” and could include actions, such as:</u></p> <ul style="list-style-type: none"> <li><u>• Installation of remote monitoring devices in radiological impacted areas (e.g., cameras, dosimetry, other sensors, etc.) that would reduce personnel traffic in the areas</u></li> <li><u>• Modification of High Radiation/Locked High Radiation control systems</u></li> <li><u>• Water chemistry changes impacting source term or personnel exposure</u></li> </ul> <p><u>The third decision diamond addresses the issue of “Radioactive Waste” and could include actions, such as:</u></p> <ul style="list-style-type: none"> <li><u>• Use of higher efficiency filters/resin that could result in more “change-outs”</u></li> <li><u>• The need to remove and dispose/store contaminated equipment or material</u></li> </ul> <p><u>The fourth decision diamond addresses “Control of Radioactive Material” and could include actions such as:</u></p> <ul style="list-style-type: none"> <li><u>• Potential storage of radioactive material outside of the RCA is needed</u></li> </ul> <hr/> <ul style="list-style-type: none"> <li><u>• Need for radiography for construction activities outside of the RCA</u></li> <li><u>• Disruption of effluent discharge lines</u></li> </ul> <p><u>An outcome of “Reassess” indicates that more information should be gathered to better define the issue/success criteria, come up with a smarter solution (e.g., performance based rule), or otherwise change the proposed action to reduce cost/increase benefit. After reassessing, the process should be re-entered to consider the re-defined issue.</u></p>		<p>NEI provided this new text.</p>
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NRC COMMENTS TO NEI 14-10 "GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION"

46



16

NEI provided this new flowchart.



NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

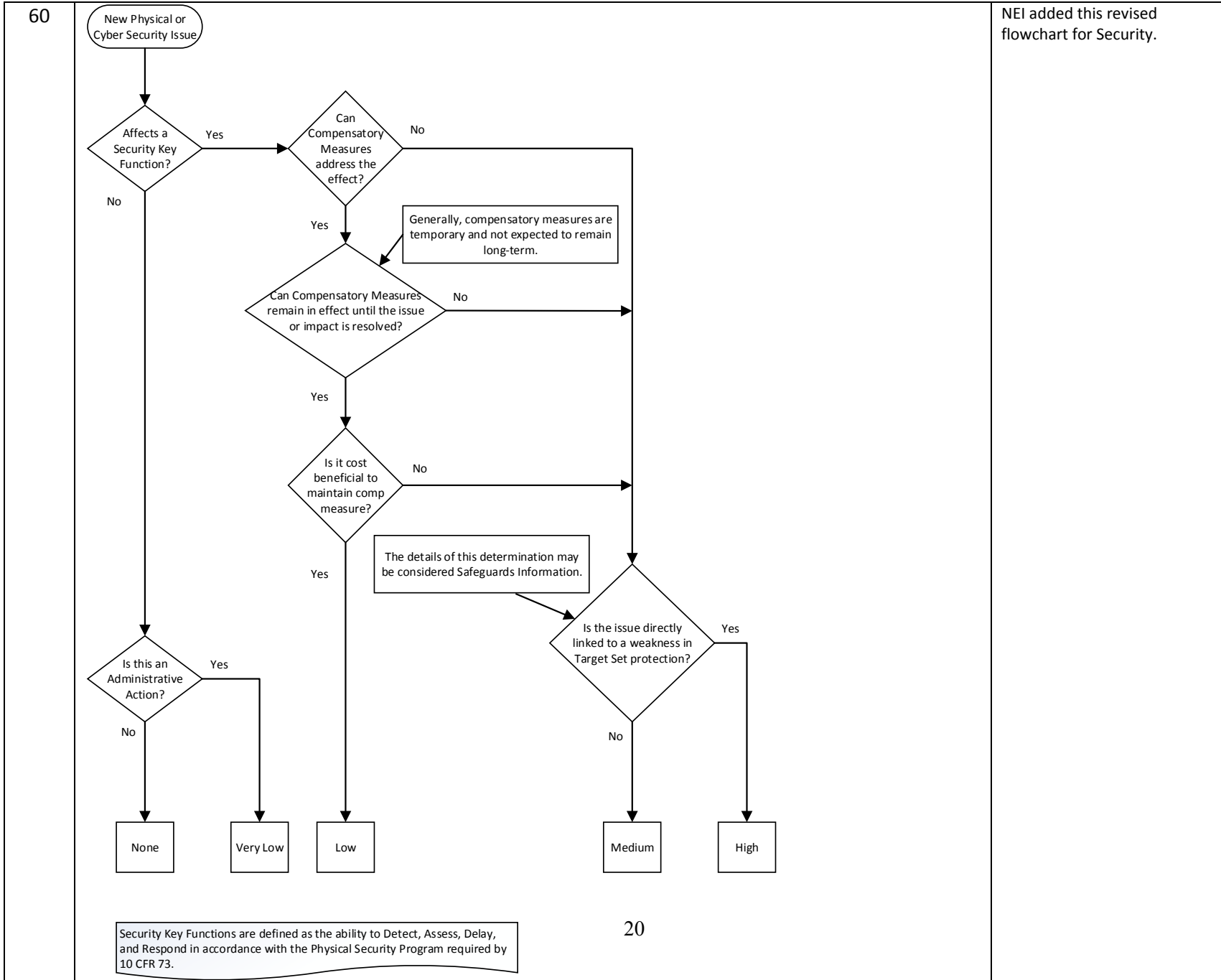
<p>51</p>	<p><b>4.5 RELIABILITY</b></p> <p>Reliability is concerned with issues or activities that have some importance and would not otherwise be appropriately captured in the safety, security, EP, or RP categories. Reliability should capture the importance of the reliability of systems, structures, and components (SSCs) used to generate electricity and the stewardship of the plant site. For example, plant aging management, replacement of equipment whose failure could have an adverse impact on overall plant performance in terms of availability, forced outage, power reduction, or potential for a reactor scram would all be considered in this category.</p> <p>A regulatory need for this category is evidenced in the existence of performance indicators (PIs) under NRC’s Reactor Oversight Process that include measures of unplanned scrams and unplanned power changes. Exceeding a threshold for a PI might indicate existence of an issue that will become one of some safety importance and could result in the plant being placed in a column of the Action Matrix with heightened regulatory scrutiny.</p> <p>Reliability importance characterization includes two basic steps: 1) a series of screening questions to address the “no impact” step; and 2) use of qualitative effectiveness estimates to assign high, medium, low, or very low importance to activities that do not screen out in Step 1. For Step 2, the overall Life Cycle Management importance is concluded based on a matrix, provided in Table 4-2.</p>	<p><b>Comment [F93]:</b> It’s not fully clear yet that this section will be beneficial to the structure of the guidance. This seems to include activities outside the purview of the NRC and provide a framework in which the NRC would essentially approve/prioritization (including deferral) of regulatory activities based on issues other than public and worker safety. In addition, the other attributes should already cover both regulatory and plant-initiated activities with a nexus with safety.</p>	<p>Revisions added to clarify reliability nexus to safety.</p>
<p>55</p>	<p><b>5.0 AGGREGATION TO DETERMINE PRIORITY</b></p> <p>After the plant IDP has assigned each issue a level of importance (high, medium, low, very low, or none) in each of the five categories (Safety, Security, EP, RP, and Reliability), the following criteria are used to assign the issue a priority level from 1 to 5. Prioritization and scheduling will be periodically updated based on plant-specific planning, e.g., annually in conjunction with updates to the business plan.</p> <p><u>The overall philosophy behind the priority scheme give given below is based on the objective to focus application of licensee’s resources to those changes that have the most benefit to the public safety. The prioritization scheme provides relatively higher weight on issues that are known to directly influence the metrics such as CDF and LERF that are directly correlated to public safety. To that extent, all issues, irrespective of whether they are related Security, EP, Rad Protection, or availability will be captured under Safety. However, the prioritization scheme also recognizes the need to prevent overlooking important issues that may not directly correlate to the key metrics/metrics that pertain to safety, and yet have an overall contribution to safety. Consequently, a High in Safety has been equated to two Highs in Security, EP, RP, and the plant availability component of the Reliability.</u></p>	<p><b>Comment [S94]:</b> The document should provide some high-rationale on on the basis for these priorities. An example paragraph for illustration is suggested.</p>	<p>(S94) – Comment addressed.</p>
<p>55</p>	<p><b>Priority 1</b></p> <ul style="list-style-type: none"> <li>• Issue defined by NRC as adequate protection, OR</li> <li>• High for Safety, OR</li> <li>• Two or more Highs for any of the four other categories (Security, EP, RP, Reliability)</li> </ul>	<p><b>Comment [S95]:</b> Should note somewhere that the CDF saving of the Reliability is captured under Safety?</p>	<p>(S95) – Added under “Reliability”; addressed.</p>
<p>57</p>	<ul style="list-style-type: none"> <li>• Priority 5 would not be normally scheduled under this process.</li> </ul>	<p><b>Comment [F96]:</b> Not clear why this category should exist, especially for regulatory actions.</p>	<p>(F96) – A Priority 5 determination is made based upon its impact on Safety, EP, RP, Security and Reliability. Whether an item is a</p>



NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

			regulatory action or not is immaterial to the priority determination.
57	<p>If an activity continues to be subject to deferral, after deferring to the third operating cycle, licensees should decide whether to begin implementation by the end of the next planned refueling outage or submit a request, using the appropriate licensing process, to eliminate the action. Licensees should document this decision with the prioritization document package for the activity.</p>	<p><b>Comment [F97]:</b> There is not sufficient guidance to understand this process and potential incentive for continuous deferral. The process is also not limited to lower risk activities, which is a concern. If a Priority 2 activity is deferred multiple times (e.g., due to personnel availability or because of re-prioritizing of emergent issues) would it be an appropriate candidate for elimination. It is not clear that elimination of regulatory activities is appropriate through RPI and consistent with Commission guidance discussed in public meetings on this effort.</p>	(F97) – Subject passage is retained.
58	<p><b>Additional guidelines</b></p> <p>1. An immediate action necessary for continued safe operation (e.g., to support NRC finding of adequate protection, or to restore compliance with a Technical Specification, or to resolve an environmental compliance issue with an adverse effect on public health and safety, or to remove a threat to personnel safety) should not use the prioritization process.</p>	<p><b>Comment [F98]:</b> This is critical guidance and should be included upfront. I.e., resources should not be used to justify risk significance of adequate protection regulatory activities.</p>	(F98) – Subject passage moved to Section 1.
58	<p><del>2. Other non-compliance issues, e.g., inspection findings, are within the scope of prioritization activities. Correction of the non-compliance should be scheduled consistent with the safety significance of the action. The results of the prioritization process may be used as justification for not correcting the issue at the first available opportunity.</del></p>		Change not incorporated. The significance of actions taken in response to findings can be, and often are, different from the significance determination of the original finding. As such, it is appropriate for consideration in this process.
59	<p><del>3.2. Immediate repairs necessary for continued power production (e.g., replace damaged main transformer) would not use the prioritization process. Implementation should not adversely impact the scheduling of Priority 1 activities.</del></p>	<p><b>Comment [F99]:</b> This would seem to obviate the need for the reliability attribute if a nexus with safety can be established using the other attributes. Otherwise, it is not clear that this category of items should receive higher priority than other activities under 1.</p>	(F99) – As stated, “implementation [of immediate repairs] should not adversely impact the scheduling of Priority 1 activities.”

NRC COMMENTS TO NEI 14-10 "GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION"



NRC COMMENTS TO NEI 14-10 “GUIDELINES FOR PRIORITIZATION AND SCHEDULING IMPLEMENTATION”

A-1	<b>APPENDIX A – EXAMPLES OF SAFETY IMPORTANCE DETERMINATION</b>	Comment [F100]: Expect additional examples to be added from insights obtained in the demonstration pilots.	(F100) – Will add a compendium of examples in an on-line database.
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