

General Comments on Safety Culture Changes

Cross-Cutting Issue Review Recommendations and Lessons Learned	
Recommendation	Industry Comment
CI-1. The regions should be encouraged to consider conducting inspection debriefs which involve both reactor divisions with attendance including staff as well as management. Several regions have or are considering expanding their inspection debriefs.	CI-1. We agree that the regions should conduct inspection debriefs with both reactor divisions in attendance; including staff as well as management.
CI-2. Revise IMC 0612 to provide additional guidance and examples for assigning and documenting crosscutting aspects.	<p>CI-2. Providing guidance and examples for assigning and documenting cross-cutting aspects is encouraged. This effort should include the addition of training.</p> <p>Cross-cutting aspects are frequently issued prior to the completion of a final cause analysis due to timing of the inspection report issuance. This leads to assignment based on what the inspector thinks is the best fit rather than an assignment based on factual information.</p> <p>Currently, the assignment of cross-cutting aspects to items that are a "significant contributor" (see MC 0305 and MC0612 Appendix F) is subjective since no clear definition of "significant" exists. We strongly encourage a clear definition of "significant" be added to help alleviate subjectivity and individual inspector interpretations.</p> <p>Inconsistent Regional expectations contribute to some inspectors assigning cross-cutting aspects to all findings and violations, which we believe is not warranted. In addition, "indicative of current performance" is not well-defined and is applied differently between Regions.</p> <p>Requiring inspectors to provide a rationale for not assigning a cross-cutting aspect to a finding may lead to significant inspector burden as this could easily lead to requiring a basis for why each aspect is not a "significant contributor". We support development and use of declarative statements that can be used by inspectors to indicate that the issue was evaluated for cross-cutting aspects and did not meet the criteria for assignment.</p>
CI-3. NRR should continue their process of providing periodic refresher training to staff on IMC 0612 and 0305 as changes are made. IMC040 No changes needed.	CI-3. Industry experience during supplemental inspections (95002) supports the recommendation that additional staff training on 0612 and MC 0305 is warranted.
CI-4. Clarify that a crosscutting theme needs to involve four or more inspection findings with the same crosscutting aspect (should not look for sub-cross-cutting	CI-4. Greater clarity is needed on this recommendation. The term "sub-cross-cutting aspect" is not defined in ROP guidance. Clarification

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aspects). (IMC0305 In-progress)	regarding what an aspect is may be required to MC 0305 through revision and/or training.
CI-5. Identified redundancy in the first two criteria for a substantive cross-cutting issue in the problem identification and resolution and human performance cross-cutting areas. (IMC0305 In-progress)	CI-5. We agree that elimination of redundancy in the first two criteria for a substantive cross-cutting issue in the problem identification and resolution and human performance cross-cutting areas will streamline the process.

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<p>PV-1. Consideration should be given to considering all 13 safety culture components during implementation of the baseline program. Additional criteria should be established for when to consider a cross-cutting theme for the safety culture components of accountability, continuous learning environment, organizational change management, and safety policies. (IMC 0305 In progress, working to incorporate the other safety culture components as crosscutting components.)</p>	<p>PV-1. Disagree. The safety culture components in MC 0305 that are not currently in the cross-cutting components are subjective and much more difficult to evaluate in the context of individual findings and will result in significant subjectivity if utilized.</p> <p>During initial development of safety culture changes, the staff concluded that the baseline could not assess these additional safety culture components. It is not clear what the basis is for the staff's change in position relative to the ability of staff to assess the additional SC components as part of the baseline.</p> <p>Additional stakeholder input and dialogue will be needed to understand the basis for incorporation of these additional aspects into the baseline and assess the impact of such a significant change in process.</p>
<p>PV-2. Consider revising IMCs 0305 and 0612 to allow inspectors to assign multiple cross-cutting aspects for each safety culture related cause associated with a performance deficiency. If the result is an increase in the number of cross-cutting aspects, then MC 0305 should be revised to raise the criteria to satisfy the requirements for a substantive cross-cutting issue. In addition, for sites with multiple units, consideration should be given to raising the criteria to satisfy the requirements for a substantive cross-cutting issue. (IMC 0612, IMC 0305 Not adopting this recommendation. Reinforcing existing flexibility to only assign multiple crosscutting aspects for unusual or complex issues.)</p>	<p>PV-2. The assignment of multiple cross-cutting aspects should not be permitted, except for exceptional cases involving complex issues.</p> <p>In addition, the thresholds for assignment of a substantive cross-cutting issue should be re-evaluated based on results from the 18-month implementation period. This need for threshold re-evaluation is independent of the action on assignment of multiple cross-cutting aspects. Since implementation of the safety culture changes, the percentage of findings that are assigned a cross-cutting aspect has increased by greater than 50% due solely to changes in how guidance is being implemented. This change, by itself, would call for an accordant increase in thresholds.</p>
<p>PV-3. Cross-cutting safety culture issues challenge the ability of the NRC to reach accurate risk informed decisions and provide an appropriate level of regulatory oversight. Consideration should be given to evaluating and developing more assertive NRC actions (such as a direct input to the ROP action matrix) for repetitive or certain types of multiple substantive cross-cutting issues. IMC 0305 (In-progress, working to slightly modify NRC regulatory responses to a repetitive substantive crosscutting issue. No changes are proposed to the ROP Action Matrix inputs.)</p>	<p>PV-3. We support the decision not to incorporate SCCIs into the action matrix.</p>
<p>PV-4. Consideration should be given to providing additional guidance in IMC 0609 on the acceptable methods to be used to assess the additional risk impact</p>	<p>PV-4. The staff should more clearly convey its intent relative to IMC 0609. However, an event has a finite risk value associated with it and the cause does not</p>

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of findings with underlying causes that are associated with the safety culture components. IMC 0609, IMC 0305, IP95003 (In-progress, working on amplifying the guidance.)	change that risk. The risk impact of a finding should be restricted to the quantifiable impact as measured by standard PRA methods.
PV-5. Consideration should be given to adding specific guidance in IP 95003 that describes the acceptable method to be used to perform the cumulative risk assessment. IP 95003 (In-progress working on amplifying the guidance.)	<p>PV-5. Does not appear to have explicit criteria. To provide a meaningful comment we need to better understand the intended modifications. Additional dialogue on this change is needed.</p> <p>The proposed revision to IP 95003 (section 03.10) refers to LIC-0504, Integrated Risk-Informed Decision-making Process for Emergent Issues, Steps 4.4.3 and 4.4.4, for guidance on assessing the cumulative risk assessment. The currently available revision to LIC-504 (Revision 2) does not contain "steps 4.4.3 and 4.4.4". It is believed that reference is being made to Sections 4.4.3 and 4.4.4. These sections provide guidance on assessment of "decision options" for emergent issues. It is neither clear why nor clear how this guidance is to be applied for cumulative risk assessment.</p>
PV-6. Consideration should be given to revising IP 95003 to include an allowance to validate the results of the licensee's root cause investigation in lieu of the NRC performing a separate root cause investigation. The NRC's completion of this activity should only occur if the licensee's investigation is determined to be incomplete. IP 95003 (In-progress.)	PV-6. Although we agree that an allowance for NRC to validate the results of the licensee's root cause investigation in lieu of the NRC performing a separate root cause investigation in those circumstances when the licensee's investigation is incomplete, caution in how this is implemented is warranted. The determination of if the licensee's investigation is complete or not should be clear and well documented and not subjective. In addition, the methodology and required detail of this evaluation should be documented and transparent to external stakeholders and the conclusions should be repeatable regardless of who performs the causal determination.
PV-7. Consideration should be given to describing root cause analysis tools other than MORT that could be used to complete the collective review of the root causes. Additionally, it may be necessary to add a root cause specialist to the team to complete the review. IP 95003 (In-progress.)	<p>PV-7. Agree. MORT is not the only valid root cause methodology. However, the methodology used should be documented as to why it was chosen by the inspection team and to a detail such that the conclusions are repeatable regardless of who performs the root cause.</p> <p>Clear expectations of what constitutes a "root cause specialist" should be developed and include any required training or experience rather than just a subjective title.</p>
PV-8. The NRC should consider partnering with industry in an effort to develop a standardized safety culture assessment process and tools, including a survey. IMC 0305 (IP95003 Considering this item.)	PV-8. NRC and the industry should develop a standardized safety culture process and tools.
PV-9. Until an industry/NRC accepted standard is developed, the NRC should perform an independent detailed analysis of the survey tool and analytical	PV-9. Efforts should be focused on the development of an industry/NRC accepted standard.

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techniques when evaluating a licensee’s safety culture assessment. IP 95003 (In-progress, intend to retain elements to validate licensee safety culture assessment methods.)	
PV-10. Consider revising IP 95003 to provide the flexibility to initiate a variety of inspection responses consistent with the performance deficiencies at a particular facility. This should include an evaluation of the existing IP 95003 boundary conditions. IP 95003 (In-progress, working to provide flexibility for site situations.)	PV-10. We believe NRC already has this flexibility. Therefore, it’s not clear why this change is being made. Additional dialogue on this change is needed.
PV-11. Consider revising IP 95003 to include an assessment of outage activities. IP 95003 (In progress, plan to amplify outage coverage and sensitivity of the outage inspection burden on licensee.)	PV-11. This assessment should only be called for if the findings(s) that resulted in the degraded cornerstone or their underlying cause(s) have a clear link to outage activities that can not be assessed during non-outage periods. Inspections, especially those that require interviews or significant data requests, can be disruptive during outages and should be minimized.
PV-12. Consider revising IP 95003 to treat the activity as a fact finding to understand the depth and breadth of performance concerns. This includes the potential for greater use of unresolved items. IP 95003 (In-progress, working to amend inspection approach.)	PV-12. The NRC should more clearly convey its intent relative to the term "fact finding". This recommendation is not clear on what would constitute a "fact finding".
PV-13. Consideration should be given to establishing and assessing precursors as part of the baseline inspection program. These precursors should be assessed as part of the IMC 0305 assessment process. (IMC 0305 In-progress, looking at correlation of safety culture components with qualitative precursors.)	PV-13. The ROP is founded on the principle that objective, risk-informed criteria should be used to determining the level of oversight. Inspection findings identified through the baseline inspection process and performance indicators serve as precursors to a decline in performance. It is unclear what additional "precursors" are needed. Additional dialogue on this change is needed.
PV-14. Consideration should be given to developing innovative methods to assess the effectiveness of inspection program implementation. IMC 0307 (Under consideration.)	PV-14. Comments will be developed when proposed changes to address comment PV-14 have been developed.
PV-15. Consideration should be given to permanently changing the resident inspector staffing requirements at three unit sites to ensure an appropriate level of oversight is maintained. (For a 3 Unit Site: 1 - Senior Resident Inspector, 3 - Resident Inspectors) IMC 0102 (Under consideration.)	PV-15. Although we agree that an appropriate level of oversight is maintained is only prudent, we not agree that 4-inspectors at a 3-unit site are always the "appropriate level" absent any additional justification on why this change is needed. Additional justification and dialogue is needed on why this change should be considered.
PV-16. Consideration should be given to providing additional guidance to supervisory and management personnel for the conduct of management site visits at facilities where only a few findings have been identified. IMC 0102 (Under consideration.)	PV-16. The NRC should more clearly convey its intent on why this level of oversight would be warranted for sites with only a few findings identified. This recommendation is not clear on the purpose or the direction management site visits would take. Additional dialogue on this change is needed.
PV-17. Consideration should be given to adding one FTE	PV-17. An evaluation should be performed of the need

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per region to focus on initial and continuing training needs of the inspection staff. IMC 0102 (Under consideration.)	for changes to the manner in which initial and continuing trainings are conducted. Training changes should be determined based on need and should be accomplished in an efficient manner.
PV-18. Consider revising IP 95003 to require implementation of the EP attachment and having an EP inspector from another regional office perform the attachment. IP 95003 (Under consideration.)	PV-18. Revision of IP 95003 to require implementation of the EP attachment is an unnecessary expansion of inspection scope. Absent an identified need, IP 95003 should not require implementation of the EP attachment.
PV-19. Consideration should be given to evaluating the implementation of the EP baseline inspection program. IP 95003 (Under consideration.)	PV-19. Although there may be some redundancy between inspections and performance indicators that could be eliminated, the intent and purpose for this change is not clear. Additional dialogue on this change is needed.
PV-20. IP 95003 boundary conditions (1, 3, and 5) should be reevaluated. For condition 1, consider adding flexibility to allow the NRC to oversee independent inspections performed by a third party. Review consistency with having an independent third-party assess the licensee’s safety culture. For condition 3 consider a revision to increase the flexibility of the procedure by allowing the use of unresolved items and a separate follow-up inspection to resolve the technical concerns (defer significance determination process evaluation). For condition 5 consider a revision to increase the flexibility of the procedure by considering the implementation of portions of the inspection procedure before the licensee has completed their third party safety culture assessment and root cause evaluation in order to promptly assess the depth and breadth of potential problem areas. Additionally, consider a revision to allow for periodic NRC assessments during the performance of the licensee’s root cause analysis and third-party safety culture assessment. IP 95003 (In-progress.)	PV-20. <u>Boundary Condition 1</u> We agree with the proposed change to boundary condition 1 assuming that oversight does not include an independent validation of the methodology used. <u>Boundary Condition 3</u> The increased use of URIs should be discouraged. <u>Boundary Condition 5</u> We agree in part with the proposed change to boundary condition 5. The IP 95003 should not take place prior to the completion of the root cause analysis but portions of the inspection could be completed before the third-party safety culture assessment.
PV-21. IP 95003-02, Inspection Requirements, indicates that if the IP 95001 and IP 95002 supplemental inspections have not been performed, then the IP 95003 should include an assessment of the licensee’s evaluation of those issues. A revision should be made to note that the licensee’s evaluation of the IP 95001 and 95002 issues may not be complete at the time of the IP 95003 inspection. If so, the review of these issues should be included in the Confirmatory Action Letter. IP 95003 In-progress.	PV-21. Additional guidance on the use of this provision, or an example, would be helpful.
PV-22. Almost all of the inspection requirements in IP 95003 are performed as part of the baseline inspection program. However, IP 95003 indicates that a duplication of inspection efforts should not occur. A revision should be made to delete a statement in IP 95003 to prevent duplication of other inspection efforts.	PV-22. We agree that duplication of inspection efforts is unwarranted and should not occur but some repetition may be necessary. The language in IP 95003 to address this should be retained, i.e., “The procedure is not intended to duplicate the scope

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<p>IP 95003 In-progress.</p>	<p>of previously performed baseline and supplemental inspections; however, some repetition may be necessary where previous inspection were not sufficient to fully scope the breadth and depth of licensee performance issues.”</p> <p>The IP 95003 inspection can include reference to the applicable inspection report(s) as a means to document that the area was inspected.</p>
<p>PV-23. To more efficiently integrate safety culture and inspection results, it may be more appropriate to embed some safety culture components in the key attributes. The additional safety culture component assessments should focus on those areas where implementation of the inspection program yields limited results. For example, most problem identification and resolution aspects can be evaluated using traditional inspection program techniques. Therefore, limited safety culture assessment interviews and focus groups are needed to assess this area. IP 95003 In-progress.</p>	<p>PV-23. The key attributes in most cornerstones already contain aspects that are either very similar to the safety culture components or are identical.</p> <p>This recommendation is not clear on the purpose or the intent. Additional dialogue on this change is needed.</p>
<p>PV-24. The requirements and guidance in section 02.07 for conducting the safety culture portion of IP 95003 should be re-evaluated. If the NRC determines that the licensee’s third-party assessment was appropriate, then there should be no need to conduct an independent assessment of all 13 safety culture components. The NRC’s assessment should determine which, if any, of the 13 components have not been adequately addressed by the third-party assessment and which, if any, of the components are not likely to be addressed by the IP 95003 key attributes. The NRC should then implement safety culture assessment activities to address the remaining components that are expected to have insufficient data to meet the objectives. IP 95003 In-progress.</p>	<p>PV-24. The proposed revisions to promote development and use of industry guidance on conduct of third-party assessments are appropriate. We support NRC’s review of a licensee’s use of this guidance in lieu of an independent assessment conducted by NRC.</p>
<p>PV-25. Re-evaluate sections 02.07 and 02.08 to only include the specific inspection requirements. All other items should be moved to the guidance section. IP 95003 In-progress.</p>	<p>PV-25. We agree that sections 02.07 and 02.08 should only include the specific inspection requirements and all other items should be moved to the guidance section.</p>
<p>PV-26. Section 95003-03 for just-in-time training should be better designed to meet the needs of the inspection teams. The training should include, in part, performance issues at the facility, root cause refresher training, administrative issues, and the conduct of the inspection. IP 95003 In-progress.</p>	<p>PV-26. We agree that just-in-time training should include facility performance issues, root cause refresher training, administrative issues and training on conduct of the inspection.</p>
<p>PV-27. Regarding team staffing, a qualification program for safety culture assessors should be institutionalized in a manual chapter. Each region should be expected to maintain a cadre of Level 2 safety culture assessors that are capable of implementing most of the IP 95003 inspection requirements. Validation of third-party safety culture assessment tools and methods requires an</p>	<p>PV-27. The extensive resource commitment, given that Column 4 plants are rare, seems unwarranted and not a responsible use of resources. We recommend the focus be on the skills, knowledge and training required for inspectors to be able to make sound, responsible decisions in this area.</p>

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additional skill set, and can be performed by headquarters personnel or contractors. These skills may not be needed in every case if the NRC and industry develop and implement a standardized safety culture assessment tool and process. IMC TBD Under consideration.	
PV-28. At a minimum, a senior reactor analyst should be required to participate in the final onsite inspection week in order to collect all of the data needed to perform a collective risk assessment of the performance deficiencies and assist in collecting the data necessary to evaluate potentially significant inspection findings. The most desirable option would be to have a senior reactor analyst lead one of the sub-groups and perform the analyst functions as a collateral responsibility. IP 95003 Under consideration	PV-28. The NRC team should include personnel needed to perform a collective risk assessment. However, depending on the circumstances surrounding the IP 95003, this may or may not require a senior reactor analyst and may take more or less than a week. This decision needs to be made on a case-by-case basis to responsibly address the issues and focus the appropriate resources.

COMMENTS ON NRC INSPECTION PROCEDURE 95003

Inspection Procedure 95003 Comments	
(Page 2, item 1)	Industry supports a graded NRC safety culture assessment scope and believes it is an appropriate use of agency resources and a more informed assessment focus. Through the development of agreed upon guidelines for the conduct of the licensee's third party safety culture assessment, NRC should be able to limit its scope to evaluation results. Note that this comment also applies to the revision to IMC 0305 06.05 b.4. The proposed wording in that section calls for "staff's validation of the third party assessment methodology."
(Page 2, item 3) Boundary Condition 3	The IP 95003 inspection team should be encouraged to pursue all questions to closure.
(Page 14) Section 02.07 Item a.1	The degree of attention and amount of resources devoted to the evaluation of the independent third party safety culture assessment is completely inappropriate. NRC should not be spending more time and resources on the safety culture assessment than it does on the root cause assessment and the review of the problem identification and resolution program. The root cause may show that safety culture has nothing to do with the cause of performance decline.
(Page 15) Section 02.07 Item b	This evaluation should focus on the results of the assessment. In general, this entire section is vague and lacks specifics on items like: what is used to perform the evaluation, what is adequate and appropriate, what qualifications are sufficient. Development of the self assessment guidelines should enable NRC to focus its resources more effectively than this section seems to imply.
(page 16) Section 02.08	The scope of NRC's graded safety culture assessment should be limited to any SCCIs, areas identified by the licensee third party safety culture assessment, and areas identified in the root cause analysis and during NRC's other 95003 inspection activities.
(Page 17) General Guidance 2 nd Paragraph.	The potential for large numbers of unresolved items could be significant thereby leading to open items for a significant period of time. Every attempt should be made to resolve the items during a 95003 inspection. Otherwise, specific controls should be in place so that the items do not linger.
(Page 17) General Guidance 4th Paragraph.	Outage activities should only be covered by the baseline inspection unless there are findings related to the 95003 (findings) This assessment should only be called for if the findings(s) that resulted in the degraded cornerstone or their underlying cause(s) have a clear link to outage activities that can not be assessed during non-outage periods. Inspections, especially those that require interviews or significant data requests, can be

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	disruptive during outages and should be minimized and not automatically included.
(Page 18) Team Staffing, 1 st paragraph.	The word opinion has no place in an NRC assessment. Perhaps the word perspective was meant.
(Page 19)	The level of detail used to discuss education and experience and appropriate credentials in multiple places and the criteria listed is inappropriate. Similar detail is not used to describe the staff members performing the equally or more important root cause and technical issue reviews. Furthermore, this listing implies that the independent third party assessment team members should have equivalent qualifications. Aside from a team leader, both NRC and third party assessments can be performed by experienced technical individuals with checklists and experience or training in interview and observation techniques..
(Page 20) Inspection Planning and Logistics.	NRC should not be interacting with the 3 rd party assessors during the development of the assessment plans and tools. Any questions or concerns should be directed to the licensee.
(Page 20) Inspection Planning and Logistics.	Except in rare cases, the licensee's root cause evaluation should be completed prior to the conduct of the 95003 inspection.
(Page 52) Section 03.07	The criteria and methodologies that will be used to determine sufficient sample size and evaluate team qualifications should be described. Specific criteria are needed to ensure consistency and accuracy in the process. Also, please clarify what is meant by "no specific guidance" in Item a.2 of this section.
(Page 55) Section 4.(b)	Guidance for assessing third party safety culture assessors ambiguously refers to qualification through "education and/or experience." This requires further clarity for industry to understand the expectations. For example, education is discussed, but no clear expectation is provided. "Knowledge and experience" are better terms when referencing team members since qualifications implies a more rigorous process than currently established in the industry. This is an important point since the level of NRC graded approach will, in part, depend on "qualifications" of the third party safety culture assessment team.
Pages 65 to end	NRC's conduct of an NRC Safety Culture Assessment as described in these pages oversteps the bounds of a

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	<p>regulator and into the prerogatives of a licensee in organizing and managing their power plant. Prying into performance evaluations and leadership assessments, to cite two examples, is beyond the appropriate bounds of the NRC.</p>
<p>(Pages 65 and 66)</p>	<p>This section discusses attitudes, which is strictly subjective. A regulator must regulate to process, procedures and regulations and not assess attitudes. No criteria exist to assess attitudes nor would any criteria be able to be effectively applied to individuals. The concept of evaluating attitudes, perceptions and values is very dangerous and irresponsible and should be removed from the procedure.</p>
<p>(Page 67) Bullet (2) Leadership assessments.</p>	<p>An NRC review of individual performance appraisals, even with names removed is inappropriate. There are privacy and confidentiality considerations which could put a licensee in a difficult legal predicament. The NRC should review a process description of the job performance policy and process.</p>
<p>(Page 68)</p>	<p>This section discusses meeting minutes from site senior management meeting, offsite alignment sessions and reviewing corporate strategies. These are inappropriate for NRC review and it is not clear how NRC would assess any information from these items in a meaningful, consistent way.</p>