DISPOSITIONING OF SAFETY CULTURE PROGRAM EFFECTIVENESS REVIEW RECOMMENDATIONS

7/13/2023 ROP Bi-Monthly Meeting

Safety Culture Effectiveness Review

- Safety Culture Effectiveness Review was completed by an NRC working group and documented in report ML22340A452 issued on March 20, 2023.
  - Conducted as part of the 2022 ROP Self-Assessment Program and results will be discussed in the 2023 ROP Self-Assessment SECY paper.

- Results of the review were discussed at the following ROP Bi-monthly meetings:
  - November 17, 2022 (Preliminary Results of the Review)
  - April 5, 2023 (After Working Group Report was Issued)
  - May 18, 2023 (Additional Industry Comments)

- The following written input was received:
  - NEI letter, "Comments on the U.S. Nuclear Regulatory Commission's Safety Culture Program Effectiveness Review," dated May 9, 2023
  - Florida Power & Light (FPL) letter, "Results of the Safety Culture Program Effectiveness Review, March 20, 2023 (ADAMS Accession No. ML22340A452)," dated June 29, 2023 (ML23180A185)

Working Group Recommendations

Recommendation 1: IMC 0305, "Operating Reactor Assessment Program," and IP 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs," should be updated to allow for an independent NRC evaluation of safety culture for plants in Column 2 of the ROP Action Matrix if the circumstances warrant.

Recommendation 2: Improve the training available to inspectors to better meet Commission objectives stated in SRM-SECY-04-0111.

Recommendation 3: IP 93100, "Safety-Conscious Work Environment Issue of Concern Followup," should be revised to cover all aspects of safety culture, in addition to Safety Conscious Work Environment. This will provide the NRC with a tool that can be used for following up on safety culture concerns to encourage meaningful action before licensees are assessed in Column 3 of the ROP Action Matrix.

Option 3a: IP 71152, "Problem Identification and Resolution (PI&R)," review of specific safety culture attributes should be expanded with a reference to the revised IP 93100 to provide guidance for a more comprehensive review of safety culture as necessary.

Option 3b: Adjustments should be made to the existing inspection framework to allow for safety culture assessment when indicated using the revised IP 93100 procedure. This would leave IP 93100 as an App. C procedure, available for use at Regional Administrator (RA) discretion using criteria to be developed separately if this option is chosen. IP 93800, "Augmented Inspection Team," and IP 93812, "Special Inspection," should be updated to reference the revised IP 93100 and consideration of including a qualified safety culture assessor on the inspection team.

Option 3c: A regular safety culture assessment, based on the revised IP 93100, should be included as part of the baseline inspection program on a tri-/biennial basis.

Working Group Recommendations

Alternative Recommendation: During discussions with NRC Regional Administrators and Division Directors, an alternative recommendation was proposed which leverages the existing IMC 0305 quarterly ROP assessment review of licensee performance. The recommendation is to revise existing assessment guidance to prompt NRC Management discussions with licensees on any safety culture aspects discussed during quarterly reviews. This recommendation would encourage licensee action to address safety culture aspects before significant performance degradation occurs. This recommendation would not require additional inspection or significant additional resources, consistent with the graded approach in SRM-04-0111 for licensees in Column 1 or Column 2 of the ROP Action Matrix.

Program Office Recommendations for Implementation

Working Group Recommendation 1: IMC 0305, "Operating Reactor Assessment Program," and IP 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs," should be updated to allow for an independent NRC evaluation of safety culture for plants in Column 2 of the ROP Action Matrix if the circumstances warrant.

Program Office Recommendation: Since this revision to IP 95001 already requires the inspection effort to determine whether the root cause, extent of condition, and extent of cause evaluations appropriately considered the safety culture traits, DRO does not believe a revision to IP 95001 is required. The 95001 inspection team could make a recommendation to the Regional Administrator to perform a follow-up Safety Culture/SCWE inspection per IP 93100 if the team believes that the licensee is not taking corrective action for a safety culture issue. An IP 93100 inspection should not be initiated if the licensee determined there was a safety culture issue that contributed to the issue and the licensee is taking the appropriate corrective action. DRO agrees with prior stakeholder comments that the updates to IMC 0305 and IP 95001 should maintain a sensitivity to the graded approach for safety culture oversight. The current guidance maintains a clear distinction in safety culture oversight in IPs 95001, 95002, and 95003.

Program Office Recommendations for Implementation

Working Group Recommendation 2: Improve the training available to inspectors to better meet Commission objectives stated in SRM-SECY-04-0111.

Program Office Recommendation: DRO agrees with this recommendation and envisions that this improved training would potentially consist of revising the IMC 1245 Appendix B independent study activity (ISA) on safety culture to cover the data streams from licensees available to inspectors and revising the "Interviewing Techniques for Inspectors" course to train on safety culture interview techniques.

As discussed in the working group report, steps are in process that will support this recommendation, as NRR has a User Need Request open with RES to enhance training on safety culture.

Program Office Recommendations for Implementation

Working Group Recommendation 3: IP 93100, "Safety-Conscious Work Environment Issue of Concern Followup," should be revised to cover all aspects of safety culture, in addition to Safety Conscious Work Environment. This will provide the NRC with a tool that can be used for following up on safety culture concerns to encourage meaningful action before licensees are assessed in Column 3 of the ROP Action Matrix. This recommendation had 3 working group options.

Program Office Recommendation: Revise IP 93100 to make it a flexible tool to enable inspection of one or more elements of safety culture as appropriate. This will make it a comprehensive inspection procedure that can be effectively and efficiently applied depending on the nature of the safety culture performance issues identified.

IPs 71152, 93800, 93812, and 95001 should also be revised to reference the new revision to IP 93100. The revision to 93100 will give the entry criteria for when RAs can approve use of this procedure. The entry criteria will be that if an inspection team uncovers a safety culture issue as part of an IP 71152, 93800, 93812, or 95001 inspection, the Regional Administrator may authorize use of IP 93100 to future inspect that safety culture issue.

Program Office Recommendations for Implementation

Alternative Recommendation: Revise existing assessment guidance to prompt NRC Management discussions with licensees on any safety culture aspects discussed during assessment reviews.

Program Office Recommendation: DRO believes that this alternate recommendation addresses the working group report discussion that the accumulation of increasing numbers of cross-cutting aspects is a statistically meaningful indicator of the potential for performance decline, as measured by the occurrence of safety-significant events and associated movement to higher column in the action matrix, regardless of what column of the action matrix a licensee is currently in.

DRO recommends revising existing IMC 0305 assessment guidance to prompt NRC management discussions with licensees on any safety culture aspects discussed during assessment reviews.

This recommendation would not require additional inspection or significant additional resources for licensees in Column 1 or Column 2 of the ROP Action Matrix, while increasing the level of NRC engagement to encourage licensee action to address safety culture aspects before significant performance degradation occurs.

Program Office Recommendations for Implementation

Summary of Program Office Recommendations:

1. Revise IP 93100 "Safety-Conscious Work Environment Issue of Concern Followup," to cover all aspects of safety culture, in addition to Safety Conscious Work Environment.

2. Improve the training available to inspectors to better meet Commission objectives stated in SRM-SECY-04-0111.

3. Revise existing IMC 0305, "Operating Reactor Assessment Program," assessment guidance to prompt NRC Management discussions with licensees on any safety culture aspects discussed during assessment reviews.

DRO agrees with prior stakeholder comments that the updates to IMCs and IPs should maintain a sensitivity to the graded approach for safety culture oversight. The current guidance maintains a clear distinction in safety culture oversight in IPs 95001, 95002, and 95003.

Safety Culture Effectiveness Review

Questions?