



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 13, 2019

MEMORANDUM TO: Gregory T. Bowman, Chief  
Reactor Assessment and Human Factors Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

FROM: Tekia V. Govan, Project Manager */RA/*  
ROP Support and Generic Communication Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS MONTHLY  
PUBLIC MEETING ON JANUARY 17, 2019

On January 17, 2019, the U.S. Nuclear Regulatory Commission (NRC) staff hosted a public meeting with the Nuclear Energy Institute's (NEI's) Reactor Oversight Process (ROP) Task Force and other industry representatives to primarily discuss the staff's progress on the ROP Enhancement initiative. A summary of the discussion topics follows below.

In opening remarks, NRC management discussed the goals and objectives of ROP Enhancement and stressed the importance of the project towards improving the ROP, taking into account nearly 100 recommendations made by both internal and external stakeholders. NRC's Executive Director for Operations commented that the fundamentals of the ROP were viewed as sound and that the ROP enhancement initiative was not looking to rebuild the foundation of the ROP, but rather to make process changes to improve its efficiency and effectiveness considering NRC's Principles of Good Regulation. It was noted that the staff will prepare a Commission paper outlining proposed changes to the ROP, which is scheduled to be completed in June 2019.

The NRC staff announced the launch of the ROP enhancement public Web site (<https://www.nrc.gov/reactors/operating/oversight/rop-enhancement.html>), where the industry and members of the public can review information on the ROP enhancement recommendations. The staff also discussed the NRC's decision to remove the NEI Recommendations 4A/4B and Recommendation 841, all dealing with licensing basis and backfit, from the ROP enhancement project. The NRC wants to place a priority on this effort, and recognizes that it interfaces with several other ongoing NRC efforts, and less directly with ROP.

Enclosure: As stated

The staff continued the meeting by providing the status of the thematic areas including: significance determination process (SDP), assessment, ROP inspection, independent spent fuel storage installation (ISFSI) inspections, and mitigating systems performance index (MSPI).

The enclosure provides the attendance list for this meeting.

### **Significance Determination Process**

The NRC staff discussed the three categories for the related recommendations—risk tools, detailed risk evaluation guidance, and ROP framework. The staff described the current proposed path for resolution and closure of the ROP enhancement recommendations. The industry did not raise any concerns or objections to the proposed path forward; however, it did request a workshop to discuss any future changes to the current guidance related to inputs that contribute to the significance of an inspection finding. The staff agreed that it might be beneficial to plan such a workshop once proposed changes to the guidance have been developed. Industry representatives stated that their biggest concern was not with the SDP itself, but with the downstream effects of greater-than-Green (GTG) inspection findings, including increased stakeholder scrutiny and business pressures.

### **Assessment**

#### **Recommendation 2A: Revise Public Communications on White Findings**

The NRC staff restated that it had completed efforts to disposition Recommendation 2A, as discussed at a December 13, 2018, public meeting. The staff is monitoring communications associated with White findings going forward to ensure existing guidance is followed. During discussion of this recommendation, the staff agreed to follow up with information on whether the guidance from the NRC's Office of Public Affairs is publicly available. After the meeting, the staff identified publicly available guidance in Management Directive 5.5, "Public Affairs Program," dated April 26, 2018, and information on the agency's approach to open government on the NRC's public Web site: <https://www.nrc.gov/public-involve/open.html>.

#### **Recommendation 2B.6: Redefine Finding Labels**

The NRC staff restated that it had completed its efforts to disposition Recommendation 2B.6, as discussed at a December 13, 2018, public meeting. The staff proposed adopting the recommendation and has identified the documents that would need to be revised. Implementation of the recommendation would be subject to management approval.

#### **Recommendation 4C: Eliminate the Pre-decisional Blackout on Licensee Communications**

Because the NRC staff views Recommendation 4C as focusing on the communications surrounding the dispositioning of findings, the staff proposed crediting the Inspection Finding Resolution Management (IFRM) process to address this recommendation. The staff noted that it had conducted an effectiveness review that considered feedback from the trial period in developing recommendations for the IFRM process going forward. The recommendations have been translated into permanent Inspection Manual Chapter (IMC) revisions that went into effect in CY 2019. The staff plans to monitor the implementation of the IFRM going forward to ensure it addresses this recommendation. The industry responded that it had seen communication improvements in a number of agency processes, including IFRM, the Technical Interface Agreement, and with the Committee to Review Generic Requirements. The industry did not

raise concerns with the staff's proposed course of action with this recommendation. The staff considers its efforts to disposition this recommendation complete.

#### Recommendation 4D: Standardize the Issue Escalation Process

The NRC staff confirmed with the industry that Recommendation 4D is an industry action to develop a standard method across the industry for escalating issues with the agency. The industry noted that this was a lower priority compared with other ROP enhancement items, and that it would not be ready for detailed discussion of this item for several months. The staff awaits an industry proposal and is therefore not currently evaluating this recommendation.

#### Recommendation 2B.1: Combine Action Matrix Columns 1 and 2

The NRC staff discussed Recommendation 2B.1 and noted that at public meetings on November 15, 2018, and December 13, 2018, the industry indicated that other actions short of merging of columns 1 and 2 could sufficiently address this recommendation. The staff noted that it was not considering the merging of columns 1 and 2, but is open to considering other changes that might address this recommendation. At this point, the industry summarized a proposed Action Matrix concept that would address integrated recommendations on combining columns, relabeling findings, and treatment of White findings (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19016A368). The staff noted that it would consider the information in the proposed concept as it worked to disposition the various recommendations.

#### Recommendation 2B.5: Prompt Closure of White Findings

The staff indicated alignment with the proposal to close White findings upon completion of a supplemental inspection. As part of its review of this recommendation, the staff noted that the treatment of GTG performance indicators (PIs) is significantly different than the treatment for GTG inspection findings. A GTG PI can return to Green and no longer be considered a GTG input in the assessment process, even if corrective actions and supplemental inspection have not been completed. This treatment of GTG PIs would be even more inconsistent with the proposed adoption of this recommendation on prompt closure of White findings. Thus, the staff discussed a proposed change to the treatment of GTG PIs that would treat them consistently with GTG findings. The industry indicated that it would like time to consider the proposed concept for the treatment of PIs and discuss further. The staff agreed to continue discussion at the next ROP monthly meeting, and perhaps a public teleconference sooner.

#### Recommendations from the NRC's Transformation Team

The NRC staff discussed the status of its review of recommendations from the NRC's transformation initiative. The staff discussed that the following recommendations suggested substantial changes to the ROP framework and would likely be closed without adoption:

- Recommendation 153 to remove White findings from the ROP
- Recommendation 231 to reduce columns in the Action Matrix
- Recommendation 337 to move to only GTG and Green/minor characterizations

- Recommendation 339 to not include GTG licensee-identified issues in the Action Matrix and to add a weighting factor to NRC-identified issues as they indicate additional deficient licensee performance
- Recommendation 340 to eliminate the ROP cornerstone concept and have plants escalate through the Action Matrix by aggregating all findings, not by considering cornerstones or strategic performance areas
- Recommendation 618 to limit further evaluation of events in which a scoping review shows the risk to be less than 5E-6
- Recommendation 839 to eliminate White findings

The staff discussed Recommendation 250 (SDP needs a transformation from risk-based to risk-informed). The SDP routinely undergoes modifications to continue to strive for the right balance between best available information, timely decision-making, and use of the best tools. The staff believes the SDP does currently consider both qualitative and quantitative information but acknowledges that improvements should be considered. The staff's review of this recommendation is ongoing.

The staff discussed Recommendation 278 (expand credit for self-identification). The industry noted that it believed this recommendation proposed crediting licensee self-assessment programs in place of inspection in certain areas. The staff acknowledged this comment and indicated this recommendation is still under review.

The staff discussed another aspect of Recommendation 339 (only consider performance deficiencies from the past 3 years) and noted that the recommendation remains under review.

The staff then discussed Recommendation 627 (stop spending significant resources on items of very low safety significance, include minimal to no documentation, no evaluation of minor versus more than minor issues, eliminate cross-cutting aspects except for safety culture, and eliminate Green findings without violations). The staff noted that ongoing efforts are already underway to address portions of this concern. Recent changes to IMC 0611, "Power Reactor Inspection Reports," dated December 13, 2017, and additional upcoming changes to how inspection reports are written will address the recommendation on resource expenditure on and documentation of items of very low safety significance. Ongoing work to improve IMC 0612, "Issue Screening," dated May 3, 2017, is intended to improve the efficiency and consistency of minor versus more than minor determinations. The staff is reviewing the recommendation on cross-cutting aspects but noted that the agency made significant recent changes in that area that appear to partially address the recommendation. Finally, the staff viewed the recommendation on eliminating Green findings without violations as undermining the ROP framework and does not plan to adopt this recommendation.

The staff noted that its proposed dispositioning of the recommendations was subject to management or Commission approval, or both, depending on the level of approval required for each recommendation. Additional discussion will occur at the next ROP monthly public meeting.

## **Reactor Oversight Process Inspection**

### **Recommendation 1D: Reduce Baseline Hours for Higher Performers**

The NRC staff addressed Recommendation 1D, to consider additional baseline inspection reductions for sustained good performers. The staff defined in IMC 2515, "Light-Water Reactor Inspection Program—Operations Phase," dated March 28, 2017, the parameters for and treatment of sustained column 1 performers. However, the staff also cautioned the industry that this could have an unintended consequence resulting in even more industry resistance to any White finding or PI that the NRC identifies. The industry agreed that this is a potential concern, and will reconsider the recommendation and discuss this topic at the next public meeting.

The NRC staff explained its review of baseline inspection procedures, considering both NEI and NRC staff recommendations. The NRC staff shared that as part of their review to right-size the ROP baseline inspection program to the current industry performance and risk they are recommending changes to approximately 10 procedures. In some cases, the team recommended inspection samples be reduced or combined with similar procedures; other recommendations requested sample additions. The agency is currently circulating all recommendations to internal stakeholders for comment.

### **Recommendation 1F: Refrain from Expanding Baseline Inspection Effort in the Future**

The NRC staff explained that it is NRC's current practice to not increase inspection hours in the baseline inspection program when new inspection requirements are incorporated into existing inspection procedures. However, staff will revise the guidance in IMC 2515, "Light Water Reactor Inspection Program – Operations Phase," to further articulate this point.

### **Recommendation 2B.2: Follow-Up via Resident Inspectors: Establish the Follow-up and Closure for White Findings through the Resident Inspector Inspecting the Causal Analysis**

## **AND**

### **Recommendation 2B.3: Redirect IP 95001: Change the IP 95001 from a Stand-Alone "Supplemental" Procedure for Whites to Become a Follow-up to Yellow or Red Findings as an Initial Inspection**

The NRC staff explained that the agency might adjust the scope of Inspection Procedure (IP) 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs," dated August 24, 2016, while maintaining the flexibility of the current procedure. The industry said it would welcome any reduction in scope, and that a more predictable process is preferred, so that licensees can have the right personnel in place when the NRC's inspection team arrives on site. In short, both parties are trying achieve the ability to handle less complicated issues that fall under IP 95001 with fewer resources, rather than applying the same complex process to every issue that puts a plant in column 2. Meeting participants also discussed the need for causal analysis versus root cause analysis for IP 95001. NRC staff discussed that they did not agree with NEI recommendation 2B.3 as the staff determined in their review that the scope of IP 95002 and 95003 are adequate.

Recommendation 2B.4 and 1E: Revise IP 71152 To Be Reactive or remove the inspection procedure from the base line program

The NRC staff did not agree with NEI's recommendation to remove IP 71152, "Problem Identification and Resolution," dated February 26, 2015, from the baseline program based on certain specific programs that the procedure covers and its ability to allow staff to examine a licensee's entire corrective action program.

**Independent Spent Fuel Storage Installation Inspection**

Recommendation 1H: Eliminate Materials Inspections of ISFSIs

The NRC staff provided a brief status update on the ISFSI inspections recommendation, explaining that, as written, it will be rejected, and the NRC will continue to perform ISFSI inspections. The staff recognized that there are opportunities for improvement and efficiencies within the ISFSI inspection program and mentioned three potential changes it is considering: (1) deletion of IP 60855.1, "Operation of an ISFSI Independent Spent Fuel Storage Installation at Operating Plants," dated September 5, 2006, (2) alignment of inspection hours used with the levels charged in the past, and (3) consistency in the training of regional ISFSI inspectors across all regions and NRC Headquarters. NEI mentioned its desire to have an inspection model similar to Region II, in which the NRC resident inspector staff completes the ISFSI-related inspection activities. The NRC staff plans to have further interactions with the regions and external stakeholders later this year.

**Mitigating Systems Performance Index Area**

Recommendation 1G: Revise Use of the MSPI

At the December 13, 2018, public meeting on ROP enhancement, focused on the assessment area, the NRC staff confirmed that the industry was in the early stages of developing a proposal for revising the MSPI. Once it had developed the proposal further, the industry would present the proposed revision to the NRC staff for review and consideration. The industry presented an initial qualitative concept of a revised MSPI during this ROP public meeting (ADAMS Accession No. ML19017A020). This was not a fully developed concept, rather a high-level initial introduction into what the industry believes would be an appropriate revision or replacement for the MSPI. The staff asked several clarifying questions during the industry's presentation but reserved any judgment on the proposal for future, more in-depth discussions.

Recommendation from the NRC's Transformation Team

The NRC transformation team provided Recommendations 171 (establish PIs that monitor licensee probabilistic risk assessment metrics) and 587 (reevaluate the ROP PIs), related to the MSPI area. The staff has not yet dispositioned these recommendations, and they were not discussed in depth at the meeting.

**Reactor Oversight Process Performance Indicator Program Frequently Asked Questions**

The NRC staff discussed Frequently Asked Question (FAQ) 18-05: Turkey Point Unit 3 Shutdown Revision 1 (ADAMS Accession No. ML19014A032). This FAQ requests guidance interpretation for the unplanned power change PI definition with regard to an event that occurred

at Turkey Point Unit 3 on November 20, 2017. The NRC received no questions or comments during the meeting on its updated proposed response. The NRC changed the response status to this FAQ to approved final status (ADAMS Accession No. ML18232A233).

### **Ongoing Significance Determination Process Updates**

The NRC staff provided the status updates below for the ongoing SDP effort.

#### **Attachment 4: Initial Characterization**

The NRC staff plans to issue a minor revision to Attachment 4, "Initial Characterization of Findings," in CY 2019. This revision will consist of modifications to better align Attachment 4 with proposed changes to Appendix A, "At-Power SDP," including minor clarifications needed to accommodate AP1000.

#### **Appendix A: At-Power Findings**

The NRC staff plans to issue a revision to Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," in CY 2019, which will clarify issues related to exposure time, functionality, and specific screening questions. Additionally, this revision will include enhancements needed to accommodate the AP1000. The staff will move existing guidance to Appendix A with the planned elimination of Appendix O, "SDP for Mitigating Strategies and Spent Fuel Pool Instrumentation."

#### **Appendix B: Emergency Preparedness**

The NRC staff plans to issue a major revision to Appendix B, "Emergency Preparedness SDP," in CY 2019. At a public meeting on January 10, 2019, staff from the NRC Office of Nuclear Safety and Incident Response provided conclusions and recommendations resulting from the focused self-assessment.

#### **Appendix C: Occupational Radiation Safety**

The NRC staff will begin the process of revising Appendix C, "Occupational Radiation Safety SDP," in CY 2019. This revision aims to improve guidance on how to disposition inspection findings with regard to the requirement to keep exposures as low as is reasonably achievable.

#### **Appendix D: Public Radiation Safety**

The NRC staff plans to issue a revision to Appendix D, "Public Radiation Safety SDP," in CY 2019. Changes will include clarifying the regulatory bases for the radioactive effluent release program and the radioactive environmental monitoring program, adding SDP logic for incorrect use of radioactive material packaging, adding SDP logic for Type A package breach scenarios, and miscellaneous administrative updates.

#### **Appendix E: Security**

The NRC staff plans to issue a revision to Appendix E, Part II, "Force-on-Force SDP," in the latter half of 2019. The staff is in the early stages of the process but expects that this revision will require Commission approval.

#### **Appendix G: Shutdown Operations**

The NRC staff plans to issue a revision to Appendix G, "Shutdown Operations SDP," in CY 2019. This revision will improve the usability of Attachment 2, "Phase 2 SDP Template for PWRs during Shutdown," and Attachment 3, "Phase 2 SDP Template for BWRs during Shutdown," and incorporate suggestions from ROP feedback forms. The update will also include revisions to accommodate the AP1000.

#### Appendix H: Containment Integrity

The NRC staff plans to issue a revision to Appendix H, "Containment Integrity SDP," very soon. This revision will expand guidance for using quantitative models for estimating large early release frequency, add definitions for close-in population and effective evacuation, and establish new guidance for assessing the timing of protective actions in detailed risk evaluations. The staff plans to issue another revision to Appendix H in CY 2019, which will focus on enhancements needed to accommodate the AP1000 and newly received feedback forms.

#### Appendix I: Licensed Operator Requalification

The NRC staff issued a minor revision to Appendix I, "Licensed Operator Requalification SDP," on January 10, 2019.

#### Appendix M: Use of Qualitative Criteria

The NRC staff issued a revision to Appendix M, "SDP Using Qualitative Criteria," on January 10, 2019. The revision scope was refined from prior efforts to overhaul the appendix. This targeted update clarified entry conditions and expanded the discussion on the decision-making attributes, leveraging the work recently completed on Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," Revision 3, issued January 2018. A potential future revision to Appendix M will consider new reactor designs and whether the current appendix is adequate for the AP1000. If a revision is required, the target date would be November 2019.

#### Appendix O: Mitigating Strategies and Spent Fuel Pool Instrumentation

The NRC staff has reviewed Appendix O, "SDP for Mitigating Strategies and Spent Fuel Pool Instrumentation," and determined that the intended purpose can be subsumed into Appendix A. The staff also plans conforming changes for Attachment 4.

### **Conclusion**

At the end of the meeting, the NRC and industry management gave closing remarks. Both the NRC and the industry agreed to plan to conduct the next ROP public meeting on February 20, 2019. They also agreed that dialogue on these topics had been productive, and that the NRC staff would continue to solicit and consider comments and feedback as the recommendations are reviewed.



SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC MEETING ON JANUARY 17, 2019

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**LIST OF ATTENDEES**

**REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC MEETING**

**January 17, 2019, 8:30 AM to 3:00 PM**

**NRC One White Flint North  
Commission Hearing Room  
11555 Rockville Pike  
Rockville, MD**

<u>Name</u>	<u>Organization</u>
1. David T. Gudger	Exelon
2. Ho Nieh	NRC
3. Margaret Doane	NRC
4. Jeffery Mitman	NRC
5. Larry Parker	Star Alliance
6. Maggie Staiger	NEI
7. Mike Murray	STPEGS
8. Harry Balian	PSEG Nuclear
9. Erin Henderson	TVA
10. Tony Zimmerman	Duke Energy
11. Chis Earls	NEI
12. James Pak	Dominion Energy
13. Tim Reed	NRC
14. Robin Ritzman	FENOC
15. James Polickoski	TVA
16. Don Johnson	NRC
17. Jerry Bonanno	NEI
18. Greg Halnon	First Energy
19. Dave Mannai	PSEG Nuclear

20. Jennifer Uhle	NEI
21. Jean Fleming	PSEG Nuclear
22. Mike Montecalvo	NRC
23. Russell Gibbs	NRC
24. Phil McKenna	NRC
25. Jeff Brem	NRC
26. George Gelrich	NRC
27. James Slider	NEI
28. Ken Heffner	Certrec
29. Daniel Merzke	NRC
30. Michelle Kichline	NRC
31. Antonio Zoulis	NRC
32. Scott Diven	Exelon
33. David Aird	NRC
34. Billy Dickson	NRC
35. Alex Schwab	NRC
36. Don Helton	NRC
37. CJ Fong	NRC
38. Nathan Sanfilippo	NRC
39. David Garmon	NRC
40. Alex Garmoe	NRC
41. Tekia Govan	NRC
42. Ami Agrawal	NRC
43. Eric Thomas	NRC
44. Terrance Reis	SNC
45. Eric Bowman	NRC
46. Mark Marshfield	NRC

47. Andrea Mayer	NRC
48. Alonzo Richardson	NRC
49. Carla Roque Cruz	NRC
50. Serita Sanders	NRC
51. Chris Miller	NRC
52. Jeremy Groom	NRC
53. John Hughey	NRC

Participated via conference line and webinar

54. Carlos Sisco	Winston and Strawn LLP
55. Ron Gaston	Entergy
56. Rob Krsek	NRC
57. Julie Boettcher	NRC
58. Rob Burg	Engineering Planning and Management
59. Steve Catron	NextEra Energy
60. Lauren Nist	NRC