U.S. Nuclear Regulatory Commission Response to the May 17, 2022, Letter Regarding the Reactor Oversight Process Enhancement Initiative

1. What is current status of the ROP Enhancement Initiative?

RESPONSE:

The topics discussed in the two previous policy papers to the Commission, *Recommendations* for *Modifying the Reactor Oversight Process Engineering Inspections* (SECY-18-0113), and *Recommendations for Enhancing the Reactor Oversight Process* (SECY-19-0067), that required Commission approval are now being addressed in several new Commission papers. Specifically, the NRC staff is drafting several Commission papers that will provide its recommendations to the Commission regarding the frequency of engineering inspections, the emergency preparedness significance determination process, and the requirement for inspection findings to remain ROP Action Matrix inputs for four full quarters coincident with a change to the treatment of greater-than-Green Performance Indicators (PIs). Additionally, the NRC staff is planning to issue a Commission paper with options and a recommendation on the frequency of problem identification and resolution (PI&R) inspections. The staff is planning to issue these Commission papers by the end of fiscal year 2022.

SECY-18-0113 and SECY-19-0067 also discussed various changes that did not require Commission approval, but rather required Commission notification. The NRC staff is making progress towards implementing those changes. As discussed in SECY-18-0113, the NRC staff is developing changes to inspection procedures to begin implementing the comprehensive engineering team inspection (CETI) and the focused engineering inspection (FEI) in the next engineering inspection cycle beginning in January 2023. With respect to the matters in SECY-19-0067 that did not require Commission approval, the NRC staff is finishing its assessment of additional data gathered since 2019 regarding the recommended changes to the inspection sample sizes for the baseline inspection procedures. Proposed changes to the inspection procedures are being discussed with NRC regional and program offices. In addition, effective January 1, 2022, the NRC staff relocated essential activities contained in Inspection Procedure (IP) 71124.02, "Occupational ALARA Planning and Controls," to IP 71124.01, "Radiological Hazard Assessment and Exposure Controls," and retired IP 71124.02. The NRC staff also conducted a risk-informed review of the independent spent fuel storage installation (ISFSI) inspection program to evaluate and enhance the existing program by developing a clearer, more risk-informed, comprehensive, and consistent approach to ISFSI inspections across the four NRC regional offices. As of January 1, 2021, the NRC staff completed all inspection procedure and inspection manual chapter revisions for ISFSI program. With regard to cybersecurity, the NRC staff completed the cyber security full implementation inspection program using IP 71130.10P, "Cyber Security." The NRC staff utilized feedback from the full implementation inspection program and input developed from a cyber security inspection program assessment to inform and update the cyber security inspection procedure, IP 71130.10, "Cyber Security," which became effective January 1, 2022. Within the ROP, these cyber security inspections are being performed on a biennial schedule beginning in calendar year 2022.

The NRC staff is also drafting recommended changes to ROP governance documents to revise the qualitative descriptions of White and Yellow safety significance. The NRC staff will make these changes along with associated changes in the current planned revision to the Enforcement Policy. This revision is on track to be sent to the Commission for its consideration by the end of calendar year 2022.

2. What is the NRC staff's timeline to resubmit its recommendations to the Commission?

RESPONSE:

The NRC staff plans to submit its recommendations and notifications to the Commission by the end of calendar year 2022. Most recently, on June 7, 2022, the NRC staff submitted SECY 22-0053, "Recommendation for Modifying the Periodicity of Reactor Oversight Process Engineering Inspections," to the Commission which requests approval to revise the frequency from a triennial inspection cycle to a quadrennial cycle for the CETI and FEI engineering inspections.

3. What new information has the NRC staff reviewed during the reconsideration of the original recommendations and how is the NRC staff using this information to modify previous recommendations?

RESPONSE:

The NRC staff examined inspection findings and operational experience gathered in the three years following the development of SECY-18-0113. The NRC staff updated its data analysis to support the recommended changes to the assessment program for licensees who moved to Column 2 of the Action Matrix due to safety-significant inspection findings and Pls that crossed a significance threshold since SECY-19-0067 was issued. Additionally, the NRC staff reviewed inspection samples completed, resources expended, and inspection findings from inspections completed since 2019, taking into consideration lessons learned during the COVID-19 pandemic. The NRC staff also reengaged the industry and public on these topics during bimonthly ROP public meetings. Based on the current status of its review, apart from the PI&R inspection frequency discussed below, the NRC staff does not plan to significantly revise its previous recommendations.

The NRC staff completed a comprehensive review of the PI&R inspection program in November 2020. That review concluded that there are opportunities to enhance the current procedure, including the guidance associated with NRC assessment of licensee corrective action programs. The NRC staff identified several changes that could improve the overall effectiveness of the PI&R inspection program. Based on planned changes to the inspection procedure and feedback from internal stakeholders, the NRC staff currently plans to provide the Commission with options and a revised recommendation regarding PI&R team inspection frequency.

4. NRC's Office of Nuclear Reactor Regulation (NRR) is the steward of the ROP, while NRC's regional offices and inspectors are tasked with implementing the program. Please describe the role of NRC's Regional Administrators in the staff effort, including whether NRR must seek approval from the Regional Administrators regarding the recommendations.

RESPONSE:

NRR develops the policy and guidance for the ROP. The NRC regions implement that policy and guidance. During NRR's ongoing assessment of the ROP, the NRC regions have participated on working groups, bi-monthly ROP public meetings, alignment meetings, and other related engagements. The Regional Administrators oversee the regional management and staff who are assigned those tasks. In addition, NRR coordinates with Regional Administrators to review and provide feedback on Commission papers that affect the NRC regional offices' responsibilities, in accordance with NRC procedure. Regional Administrators document their review and feedback as part of the formal concurrence process, which NRR uses as input to the final policy proposals provided to the Commission.

- 5. Please provide the total number of public meetings associated with the ROP Enhancement Initiative:
- a. Prior to the submission of SECY-19-0067, "Recommendations for Enhancing the Reactor Oversight Process," on June 28, 2019;

RESPONSE:

The NRC held 15 public meetings where the topic of the meeting was the ROP Enhancement Initiative prior to June 28, 2019.

b. Between the submission of SECY-19-0067 and the Commission's approval for the Staff to withdraw the paper on August 5, 2021; and

RESPONSE:

The NRC held eight public meetings where the topic of the meeting was the ROP Enhancement Initiative between June 28, 2019, and August 5, 2021.

c. Since August 5, 2021.

RESPONSE:

The NRC held five public meetings where the topic of the meeting was the ROP Enhancement Initiative since August 5, 2021.

6. Please detail the total number of NRC staff, with specific staffing utilized within NRR, the respective regions, and other offices, that have been dedicated to this initiative:

RESPONSE:

The responses to part (a)-(c) of this question describe the level of effort and interoffice coordination on this initiative over the specified timeframes, in addition to conducting the public meetings discussed in response to question 5.

a. Prior to June 28, 2019;

RESPONSE:

The NRC had eight working groups with staff from NRR, the Office of Nuclear Material Safety and Safeguards (NMSS), the Office of Nuclear Security and Incident Response (NSIR), and the NRC Regions working on the ROP assessments during this timeframe.

b. Between June 28, 2019 and August 5, 2021; and

RESPONSE:

The NRC had three working groups with staff from NRR, NMSS, NSIR, the Office of Nuclear Regulatory Research, and all four NRC Regions working on the ROP assessments during this timeframe.

c. Since August 5, 2021.

RESPONSE:

The staff efforts since August 5, 2021, have focused on reevaluating the bases for the previous recommendations, updating analyses, and developing and gaining alignment on the recommendations that will be provided to the Commission. Staff in NRR and NSIR are drafting

Commission papers requesting Commission approval, where necessary, on recommendations for modifications to the ROP. Additionally, the NRC staff continues to make progress on the remaining ROP changes that do not require Commission approval.

- 7. Please detail the total amount of funding, with specific funding amounts within NRR, the respective regions, and other offices, that has been dedicated to this initiative:
- a. Prior to June 28, 2019;
- b. Between June 28, 2019 and August 5, 2021; and
- c. Since August 5, 2021.

RESPONSE:

The resources for the ROP assessments are budgeted and executed as part of the overall management of the ROP, which includes resources for continuous improvement of the ROP, such as performance indicators, inspection procedures, the significance determination process, and assessment. Our existing data does not include sufficient granularity to allow the NRC to determine the dedicated resources for this activity over the timeframes specified.