Additional Questions for the Record

Subcommittee on Energy and
Subcommittee on Environment and Climate Change
Hearing on
"Keeping Us Safe and Secure: Oversight of the Nuclear Regulatory Commission"
July 14, 2021

The Honorable David A. Wright, Commissioner, Nuclear Regulatory Commission

The Honorable Cathy McMorris Rodgers (R-WA)

- During the July 14, 2021, Committee on Energy and Commerce Hearing, Committee
 Chairman Representative Frank Pallone asked Chairman Hanson about the status of the
 Reactor Oversight Process (ROP) changes proposed by the staff in 2019.

 Representative Pallone also asked Commissioner Baran for his views on the proposed
 ROP changes.
 - a. Please provide your perspectives on the staff's ROP enhancement initiatives, including any recommendations before the Commission related to selfassessments, the status of the papers before the Commission, and any concerns you have with the initiatives.

RESPONSE:

I appreciate the opportunity to provide my perspectives on the staff's Reactor Oversight Process (ROP) enhancement initiatives, which are outlined in SECY-19-0067 (ROP enhancement paper). I will also touch on the staff's recommendations related to ROP engineering inspections outlined in SECY-18-0113. Finally, I will provide an update on the status of the papers. As an initial matter, I am troubled by what I view as an incomplete representation of the ROP enhancement initiatives. Most troubling is the claim that the objective or outcome of the ROP enhancement initiative is to weaken oversight. That is not the case. The objective of the staff's

ROP enhancement initiative is to use risk insights to develop smarter samples, thus maintaining or improving safety while also improving efficiency. This objective is consistent with the NRC Principles of Good Regulation and past ROP efforts and changes. Since its inception in 2001, the ROP has used a sampling approach and has constantly been assessed for improvements, with inspections being added, eliminated, or modified based on fleet performance and external conditions (e.g., September 11th, Fukushima), typically as part of the agency's normal work practices through the NRC's transformation activities, stakeholder correspondence, feedback from ROP public meetings, and the annual ROP self-assessment program. The NRC staff conducted an integrated, holistic review of the ROP to identify areas for improvement and increased effectiveness and provided support for those changes in SECY-19-0067 and its enclosures.

Another claim is that the ROP enhancement initiative did not account for stakeholder input. The staff's ROP enhancement initiative included extensive interaction with stakeholders and consideration of their views. Since launching the enhancement initiative in 2018, the NRC has held approximately 50 public meetings which have been attended by the NRC staff, licensee personnel, vendors, state governments, Nuclear Energy Institute, media, and non-governmental organizations such as the Union of Concerned Scientists (UCS). In March 2019, the NRC held a dedicated public session at the Regulatory Information Conference on ROP enhancement. Dr. Ed Lyman of UCS was one of the presenters. The staff also leveraged over two decades of historical ROP data and experience in assessing plant performance. The staff then developed the ROP enhancement paper, which proposed modest recommendations to enhance the ROP and included a discussion of external stakeholder views and alternative views on those recommendations.

¹ This total number includes public meetings held by the Office of Nuclear Security and Incident Response, the Regional offices, and the meetings listed on the NRC's ROP Enhancement webpage.

There is also a misconception that the staff's ROP enhancement recommendations included proposals to replace NRC engineering inspections with licensee self-assessments. The ROP enhancement paper makes no recommendations about these self-assessments. A separate paper on ROP engineering inspections (SECY-18-0113) described an option that would substitute a licensee self-assessment for a focused engineering inspection *once every four years*. For context, that would amount to a reduction in direct inspection of less than 2%.² The staff communicated at a public meeting on July 31, 2019 that it was no longer considering the industry proposal of using industry self-assessments to supplement or replace selected ROP engineering inspections. Further, no other proposal related to self-assessment has been provided for Commission consideration since that time. Therefore, the Commission is not considering approving self-assessments as part of the ROP enhancement initiative or otherwise. If at any time in the future the staff or industry wish to pursue licensee self-assessments in lieu of independent inspections, the Commission would have to approve such a change.

Perspectives on the ROP Enhancements Outlined in SECY-19-0067

I have no concerns with the staff's ROP enhancement recommendations in SECY-19-0067. The staff's recommendations covered several areas, including assessment, inspection, and emergency planning and were made after an extensive review of the effectiveness of NRC inspections. In my view, these recommendations are primarily a matter of staff's technical judgment rather than a policy matter. The staff's recommendations were thoughtful, risk-informed, data-driven, and informed by extensive engagement with internal and external stakeholders. I especially value the insights provided by our NRC Resident Inspectors, who perform daily on-site inspections and monitoring at the nuclear power plants.

 $^{^2}$ SECY-18-0113 projected that a focused engineering inspection would require 210 hours of direct inspection. A reduction of 210 hours every four years equates to an annualized reduction of 210 hours / (4 x 3000 hours) = 1.7% reduction in direct inspection effort.

I believe the staff's assessment recommendations related to the treatment of Performance Indicators and descriptions of inspection findings would increase the reliability and clarity of our assessment process and would encourage nuclear power plant operators to correct plant problems in a more timely manner. With respect to inspection and emergency planning, I believe the staff's recommended changes were supported by data and would focus inspectors' efforts on the most important and safety significant issues and eliminate redundancies. In my view, eliminating unnecessary redundancy and focusing on risk significant issues are risk-informed changes that increase our effectiveness as a regulator and provide appropriate flexibilities.

Current Status of SECY-18-0113 and SECY-19-0067

On August 3, 2021, the staff notified the Commission that there is new information and activities relevant to its recommendations and requested approval to withdraw both SECY-18-0113 and SECY-19-0067. On August 5, 2021, the Commission approved the withdrawal of both papers. I supported withdrawal of the papers for several reasons. First, in any matter I consider, it is critical to have full and accurate information from the staff. Given the evolving nature of the ROP and the time elapsed since the papers were submitted, it is not surprising that the staff has additional insights to provide to the Commission on its previous recommendations and any other possible ROP enhancements. I appreciate the staff's evaluation of this information and its reengagement with internal and external stakeholders. Second, it is my understanding that the staff has the authority to implement certain items described in both the engineering inspections paper and the ROP enhancement paper without Commission approval and therefore does not need to wait for Commission action to implement some of the enhancements. For example, my understanding is that the staff has already implemented several of the inspection procedure revisions like eliminating redundant adverse weather inspection samples, clarifying inspection resource estimates, incorporating lessons learned into security baseline procedures, and

making minor revisions to the supplemental inspection guidance outlined in Inspection

Procedure 95001. I also understand that the staff has the authority to and may implement other recommended changes, such as revisions to sample sizes and resources for several baseline inspection procedures and implementation of the Focused Engineering Inspection and the Combined Engineering Team Inspection concepts, before the next inspection cycle. I support the staff's efforts to implement those items expeditiously if the staff continues to support their implementation after considering the new information and activities noted in the withdrawal request. I look forward to engaging with the staff on any new recommendations that require Commission approval.

2. Given the nature of the hearing, you were not always provided time to respond to Member questions. Upon reflection, do you have any additional comments you would like to provide for the record to respond to issues raised at the hearing?

RESPONSE:

I appreciate the opportunity to provide additional comments for the record to respond to issues raised at the hearing which I did not have an opportunity to address.

There were statements made at the hearing that there is a "gap" with respect to post-Fukushima safety measures at nuclear power plants. I do not share this view. Instead, I believe that the plants are protected given the measures already in place and the site-specific analyses done on the reevaluated flooding and seismic hazards. If the NRC identifies any new information suggesting that more is required to address the hazards, it has the authority and tools to take appropriate action.

I was also asked about what could be done to ensure that subsequent license renewal (SLR) continued to be efficient. I believe the NRC should continue to leverage lessons learned from the first SLR application reviews, including updating the generic environmental impact statement on license renewal to clarify its applicability to SLR and adopting best practices in preparing the site-specific supplemental environmental impact statements (e.g., beginning consultations early).

Finally, I would like to thank the staff for its dedication and efforts during the COVID-19 pandemic. I could not be prouder of the way the agency pivoted to almost 100% telework and adapted our reviews, inspections, and practices to accommodate COVID-19 related issues. I appreciate the staff's thoughtful consideration of which of these practices should continue going forward.