

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

March 10, 2020

MEMORANDUM TO:	Anthony D. Masters, Chief Reactor Assessment and Human Factors Branch Division of Inspection and Regional Support Office of Nuclear Reactor Regulation
FROM:	Russell A. Gibbs, Senior Reactor Operations Engineer / <b>RA</b> / Reactor Assessment and Human Factors Branch Division of Inspection and Regional Support Office of Nuclear Reactor Regulation
SUBJECT:	LESSONS LEARNED AND INSIGHTS GAINED FROM THE REACTOR OVERSIGHT PROCESS ENHANCEMENT INITIATIVE

## Purpose

The purpose of this memorandum is to document lessons learned and insights gained from the initial implementation of the Reactor Oversight Process (ROP) Enhancement initiative. The initiative began in October 2018 with a goal to further improve the ROP by making it more risk-informed and performance-based taking into account NRC Principles of Good Regulation. This memorandum will be shared with all parties involved, and others with a goal that the lessons learned and insights gained will be applied to future NRC projects, as appropriate.

#### Background

As a result of significant internal and external stakeholder feedback on ways to enhance the ROP, the NRC initiated ROP Enhancement. In 2018, 99 recommendations were received – 72 recommendations from NRC staff and external stakeholders through the NRC's Transformation Team (ADAMS Accession No. ML18292A594) and 27 recommendations from the Nuclear Energy Institute (ADAMS Accession No. ML18262A322). The NRC's Division of Inspection and Regional Support formed a team of experts and managers to disposition the recommendations in a phased approach initially focusing on those recommendations which could be addressed in the nearer term – about six months. Following numerous public meetings and presentations to discuss the enhancements and to seek feedback, as well as significant interactions with regional and headquarters experts, the staff presented the results of this first phase of ROP Enhancement in SECY-19-0067, Recommendations for Enhancing the Reactor Oversight Process (ADAMS Accession No. ML19070A036). Other longer-term recommendations are also being addressed. All recommendations received have been dispositioned in a publicly available memorandum from the Office Director of Nuclear Reactor Regulation to the Deputy Executive Director for Reactor Programs (ADAMS Accession No. ML19101A334).

# <u>Methodology</u>

All significant contributors to the ROP Enhancement initiative were requested to provide their top three inputs on (1) what was performed well and (2) what could have been performed better during the project. The initiative primarily consisted of NRC staff and managers who served as thematic area leads and associated knowledgeable staff, Regional Advisory Panel members, regional technical support branch chiefs, and managers who provided overall oversight and management of the project. Input was also received from external industry stakeholders including the Nuclear Energy Institute and State Liaison Officers.

## **Results**

From the feedback received, the lessons learned and insights gained were grouped into three main areas:

- Organizational Considerations
- Communications
- Schedule and Execution

# **Organizational Considerations**

- 1. An overall management team proved highly effective towards keeping the project moving and focused on outcomes. Having a single designated manager working closely with the team leader was effective.
- 2. The use of thematic area leads proved mostly effective and efficient taking into account the large and diverse areas covered. However, from a project management standpoint, it was sometimes difficult to keep all the leads informed on the project. The fast pace of the project was a large contributor to this challenge. More frequent and routine team meetings would have likely helped to address this challenge.
- 3. A team charter should have been prepared before the project began with an emphasis on identifying roles and responsibilities for all team members. Priorities and workload should be considered in preparing the charter with clearly stated expectations. The charter should be referenced throughout the project to ensure it remains valid.
- 4. Establishing an overall team leader proved mostly effective to ensure that the large number of involved staff worked together to ensure the goals and objectives of the project were met. For complicated projects, it is essential that work activities are appropriately integrated. Depending upon the level of similar activities, an assistant team leader may be considered.
- 5. The formation of the Regional Advisory Panel (RAP), consisting of regional division directors, was an effective way to ensure the regional offices were engaged. It is important that the RAP members and those they interact with in the regions understand their specific roles in the project. The RAP members were effective at soliciting feedback from regional inspectors.

- 6. An executive sponsor proved to be highly beneficial. When selecting the sponsor, it is important to select the most appropriate management level. For projects affecting multiple offices, the sponsor should be an Office Director or Deputy Office Director.
- 7. A well organized and up to date SharePoint site should be considered for use by internal stakeholders. Communicating the importance of the SharePoint site and expectations for its use by all team members should be emphasized.
- 8. Due to the fast pace and complexities of the project, assigning administrative support staff dedicated to the project to assist with the large number of meetings and related documents would have been more effective.

# Communications

- It is essential to identify a problem statement, goals, and objectives of the project and to discuss these with internal and external stakeholders for a common understanding of the project and the path forward. It is also essential that key messages be developed before the project is started to ensure that all stakeholders understand the purpose behind the project recognizing that these messages may change.
- 2. A Communication Plan was very helpful as it identified the various communication mechanisms that should be considered, especially when there is a broad and diverse audience. The Communication Plan should be prepared before the project begins or shortly afterwards and then reviewed during the project to ensure adherence and to update, as needed. The plan needs to be shared with a broad spectrum of those responsible to reach out to NRC external stakeholders, including Public Affairs Officers, the Office of Congressional Affairs, and Regional State Liaison Officers.
- 3. Multiple stakeholders should be identified that may have interest in the project. In the case of ROP Enhancement, a conscious effort to identify certain potentially interested parties, such as non-governmental organizations, proved to be helpful towards ensuring a broader audience was involved. Other potentially interested parties such as State representatives and Congressional staffers should be considered.
- 4. There should be close coordination with the Office of Public Affairs and potentially the Office of Congressional Affairs, especially when proposed changes will require Commission approval and potentially attract media interest.
- 5. Multiple mechanisms for internal communications should be developed. One pagers, inspector seminars, the Inspector Newsletter and presentations geared towards specific audiences, proved to be very helpful.
- 6. The development of an external website should be considered which gives user-friendly access to important information such as scheduled meetings, meeting summaries, and key documents. The website should be constructed to attract the general public, not just those external stakeholders who are familiar with the project. Other mechanisms to inform the general public should be considered, such as Facebook and Twitter.

## Schedule and Execution

- Leveraging other ongoing work within the NRC as it related to enhancing the ROP proved to be highly effective. In the case of ROP Enhancement, the work that had been taking place in the radiation protection, emergency preparedness and security cornerstones, and the work done for engineering inspections added a great deal of depth and substance to the project. However, although including the various activities together under the ROP Enhancement initiative scope was helpful for communications, it proved to be challenging in being able to press forward with nearer term completed work for certain activities.
- Alignment with various levels of leadership from all the affected offices on goals, objectives, and path forward should be gained early and routinely through the project to ensure that all parties have a common understanding of the project and its goals and objectives. More division director level meetings for each thematic area would have been helpful for this particular project.
- 3. When deemed appropriate, the schedule should account for additional time to allow external stakeholder review of supporting data to gain various perspectives and insights. In the case of ROP Enhancement, certain activities such as the proposed change to treat performance indicators the same as inspection findings in the Action Matrix, proved to be challenging because industry representatives did not believe they had ample opportunity to provide their perspectives of the supporting data. The establishment of a joint NRC-Industry Task Force to review the recommendations would have likely addressed this challenge.
- 4. Although establishing an aggressive deadline for completion of this first phase of the project forced all involved to be get the work done sooner, it caused a great deal of stress on the staff and other involved external stakeholders. It is essential to carefully consider all the activities that need to occur by establishing a well thought out project plan with milestones, priorities, and the appropriate degree of urgency needed.
- 5. The overall project plan should include routine briefings that continue during the drafting of the final recommendations to provide status and any changes being proposed. In this case, some team members were unaware of what was being drafted in the final SECY that was submitted until it was nearly completed.
- 6. Assigning an experienced and resource dedicated SECY paper author to collect all inputs, write the paper and manage the paper throughout its development and concurrence played a critical role in meeting an aggressive schedule and producing a high-quality product.
- 7. Placing high emphasis on soliciting and documenting alternative views to proposals gave the project a complete story for the Commission to consider.

## **Conclusions**

The first phase of the ROP Enhancement Project was a highly collaborative project with an aggressive timeline that directly and routinely involved over 20 NRC staff and managers and numerous external stakeholders. The project demonstrated that a great deal of work can be

accomplished in a short period of time if the proper attention and priority is applied by the affected organization(s). Due to the aggressive and substantive nature of the project, a large degree of preplanning, communicating, and focused execution was necessary for success. Special consideration should be given to performing these type activities more routinely recognizing that they can place a great deal of stress on the organization's staff and other involved external stakeholders.

#### SUBJECT: LESSONS LEARNED AND INSIGHTS GAINED FROM THE REACTOR OVERSIGHT PROCESS ENHANCEMENT INITIATIVE, MARCH 10, 2020

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## ADAMS Accession No.: ML19252A231

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