



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

November 7, 2019

MEMORANDUM TO: Anthony D. Masters, Chief
Reactor Assessment Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

FROM: Tekia V. Govan, Project Manager */RA/*
Oversight and Support Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS
MONTHLY PUBLIC MEETING HELD ON OCTOBER 23, 2019

On October 23, 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 executives, and other senior industry executives, to discuss the staff's progress on the ROP enhancement initiative and other ROP topics.

ROP Enhancement Updates

On August 7, 2019, the NRC staff published Commission Paper (SECY)-19-0067, "Recommendations for Enhancing the Reactor Oversight Process," dated June 28, 2019, in the federal register with a 60-day public comment period. The public comment period for SECY-19-0067 closed on October 7, 2019, with 89 comments received. Most of the comments were from members of the public. The staff received three comments from non-government organizations, four from state and local governments, and four comments from the nuclear industry. The comments were forwarded to the applicable NRC thematic area leads for evaluation.

The NRC staff provided a summary of the Phase 2 ROP enhancement initiatives in the areas of radiation protection, security, independent spent fuel storage installation inspections, cross cutting issues effectiveness review, significance determination process, and emergency preparedness. It was also announced that the staff's efforts on problem identification and resolution (PI&R) are on hold. The staff indicated that it may be best to understand the result of the cross-cutting issues effectiveness review and use those results to scope the PI&R initiative.

CONTACT: Tekia V. Govan, NRR/DRO
(301) 415-6197

Radiation Protection

The NRC staff provided background and status on proposed changes to the radiation safety inspection procedures, including a general overview of the ROP framework as it pertains to radiation safety. In keeping with the NRC's Principles of Good Regulation, the staff periodically evaluates the effectiveness of the inspection program to ensure it is achieving the oversight function in the most efficient manner. As part of this effort, the NRC staff openly considers feedback from internal stakeholders as well as the public and other external stakeholders. Additionally, the NRC staff considers observations from periodic programmatic review efforts, like that conducted through Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program." In responding to ROP enhancement-related recommendations in the area of radiation safety, the NRC staff looked for synergy between regular program improvement efforts and the recommendations provided by industry. The NRC staff has held four public meetings (December 14, 2018, February 28, 2019, May 30, 2019 and July 23, 2019) to describe its radiation safety-related activities under the auspices of the ROP enhancement and sought input and feedback from external stakeholders. The staff has applied the input from stakeholders in its independent decision-making process to make program improvements that would continue to meet the NRC oversight functional needs in the most efficient manner.

As part of its ROP enhancement Phase 2 efforts, the NRC staff is proposing to change the frequency of inspections in the areas of effluents and environmental monitoring and to introduce inspections to provide risk-informed, performance-based oversight of performance in securing Category 1 and Category 2 radioactive material per Title 10 Code of Federal Regulations (10 CFR) Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material." The staff plans to notify the Commission of these proposed changes prior to implementation. Changing the frequency of inspections in the effluent and environmental monitoring areas acknowledges that industry performance in this area is adequate and, as a result, effluents have steadily decreased or remained steady at low levels since implementation of the ROP; that effluent levels across the industry are consistently below the "as low as reasonable achievable" guidelines established through 10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion "As Low as is Reasonably Achievable" for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents;" and that environmental monitoring results show minimal radiological impact of nuclear power plant operations on the environment. The addition of inspection guidance to cover performance under 10 CFR Part 37 would implement a long-term, risk-informed framework to provide oversight in this area. The NRC staff has determined that the approaches licensees have taken to comply with 10 CFR Part 37 are adequate through an inspection manual temporary instruction. Therefore, the staff has concluded that a risk-informed inspection on certain key aspects of licensee performance in this area is sufficient to meet the NRC's oversight function. Inspections would focus on 10 CFR Part 37 material that is stored outside the security protected area, reviews of required periodic assessments, and transportation of 10 CFR Part 37 material.

Finally, the NRC staff announced a public meeting to be held on December 18, 2019, from 11:00 am – 12:30 pm, to discuss recent changes that impact the radiation safety cornerstones.

Security

The NRC staff provided the following items as background on the ROP enhancement security initiative:

- NRC management chartered two separate teams to review IMC 0609, Appendix E, “Part I and II Security Significance Determination Process (SDP) and the Baseline Security Inspection Procedures.” As a result of this review, IMC 0609, Appendix E, Part I, was revised and issued on September 17, 2018. The revision included input from both internal and external stakeholders.
- On January 1, 2019, the security inspection procedures were revised and implemented based on input from internal and external stakeholders.

The staff is currently awaiting NRC Commission response on COMSECY-19-0006, “Revised Security Inspection Program Framework (Option 3) In Response to SRM-17-0100,” which requests approval to revise security inspection program framework with emphasis on the force-on-force (FOF) inspection program (ADAMS Accession No. ML19058A094). The staff is also awaiting a Commission vote on SECY-19-0055, “Crediting Options for Operator Actions and Law Enforcement Response” (ADAMS Accession No. ML19080A274).

Significant changes to the security inspection and assessment program were placed on hold pending direction from the NRC Commission. However, the staff will be making incremental changes based on insights gained during implementation of the revised inspection and assessment program.

Independent Spent Fuel Storage Installation (ISFSI)

The NRC staff provided an update that the ISFSI recommendations memorandum was provided to NRC management on October 7, 2019, for review and concurrence. The staff explained that the management review is still ongoing as a result of recent management changes. The staff also presented the timeline for the activities that will follow management concurrence. The staff plans to make the recommendations available for public comment and hold a public meeting to discuss the recommendations in December 2019.

Cross Cutting Issues (CCI)

The NRC staff continues its work on the cross-cutting issues effectiveness review and plans to complete their effort by early November. The staff will be prepared to discuss their assessment and any recommendations at the November ROP public meeting. A report summarizing the staff’s activities, assessment, and recommendations will be completed by the end of 2019.

Significance Determination Process (SDP)

To verify that communications and exchange of information continues to be effective, the NRC staff will continue monitoring implementation of the inspection finding resolution management process. The staff is continuing to pilot the implementation of a common cause failure (CCF) approach that provides the option for justification of unique strategies that minimize the

likelihood of CCF. An initiative is also underway to review and refine human reliability analysis tools. Staff will continue to provide periodic updates at future ROP public meetings.

Emergency Preparedness (EP)

The NRC staff has revised the EP training program and other associated procedures that do not require Commission approval. The scope of these changes consists of removing any ambiguity from the training documents and procedures.

The staff has indicated that the revision to IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process" will be made publicly available to support a public meeting in November 2019.

Additionally, the NRC staff indicated that NEI White Paper, "Implementing a 24-Month Frequency for Emergency Preparedness Program Reviews," in support of 10 CFR 50.54(t) will be discussed in a public meeting on October 29, 2019.

During the September 25, 2019 ROP monthly meeting, NEI provided an overview of a White Paper entitled, "Counting of DEP Opportunities from an Actual Emergency Following a Retraction of the Emergency Declaration" (ADAMS Accession No. ML19266A321). The staff indicated that they are still reviewing the document, but the initial reaction is that the staff disagrees with the position presented in the White Paper and encourages NEI to consider enhancing the guidance that is currently stated in the White Paper. The staff will revisit this item in a future ROP meeting after their review is complete.

Significance Determination Process Updates

Although noted on the agenda, the NRC staff did not have any updates to provide in this area. The staff will provide updates on this topic at the November 2019 ROP monthly meeting.

Response to Questions from Members of the Public

During the meeting, members of the public asked the following questions, in which the NRC staff committed to providing a response and documenting in the meeting summary (Please note that the questions are quoted as submitted in writing to the NRC staff):

1. "Re: Climate extremes, what security & tech parameters, guidance, rules is the NRC taking into consideration with respect to climate extremes, specifically how unusual weather events impact infrastructure, above and below ground, electronics or plumbing susceptible to flooding or high wind phenomena, and the effect of entropy upon cement and radioactive bombardment on metal infrastructure over time. My concern is that with an aging fleet of nuclear reactors and climate extremes, less oversight seems counter-intuitive."

NRC Response: The NRC's established regulatory processes have ensured that licensed facilities are protected against natural phenomena. The NRC's existing framework and processes consider the potential impacts of climate change, including potential sea-level rise, in both the safety and environmental review processes for proposed new nuclear power plants. Moreover, operating plants must deal with the effects of climate change (e.g. sea level rise) through the requirements of their license, including Technical Specifications, to maintain structures, systems and components in an operable condition.

The NRC's enhancements to the existing regulatory processes are described in SECY-16-0144, "Proposed Resolution of Remaining Tier 2 and 3 Recommendations Resulting from the Fukushima Dai-Ichi Accident" (ADAMS Accession No. ML16286A552) and are referred to as the Process for the Ongoing Assessment of Natural Hazards Information (POANHI). The Commission approved this process, which uses a graded approach to proactively, routinely, and systematically seek, evaluate, and respond to new information on natural hazards, including both seismic and flooding phenomena. The NRC staff is currently developing infrastructure to support implementing the framework. Under POANHI, the staff will leverage and enhance ongoing interactions with internal and external partners (including other Federal agencies, academia, industry, regulators from other countries, and other technical and scientific organizations) to ensure that pertinent new hazard information is routinely and systematically collected from a variety of sources and included as part of a natural hazards knowledge base. Consistent with current NRC practices, the staff will hold public meetings and seek formal public comment at appropriate times in the process. The staff expects to meet the Commission's expectation of completing and implementing the POANHI program in 2019.

2. "My second question is specific to security awareness and 'oversight' in a rapidly degrading international political environment. Today I came across article asking the question, what if oil had not been a recent target, but nuclear had been (Saudi Arabia). Terrorists exist within our borders as well as outside. As demonstrated by 911, aviation (and ground based missiles) can be used to compromise US targets. With relaxed regulations, will the NRC and nuclear industry be capable of foreseeing and protecting nuclear facilities?"

NRC Response: The NRC is not proposing to relax the security regulations that govern operating nuclear power plants. Nuclear power reactor licensees are still required to establish and maintain a physical protection system that can protect against the design basis threat for radiological sabotage. Through inspections, the NRC will continue to verify that each nuclear power reactor licensee is operating the facility according to the security regulations. This includes FOF security inspections, which the NRC will continue to conduct at each operating reactor once every three years as required by law.

The NRC staff will also continue to constantly monitor the domestic and overseas threat environments for potential credible threats to NRC licensees. If a threat is found to be credible, the NRC can use a variety of approaches, depending on the nature of the threat, to ensure that a facility is being adequately protected.

For additional information regarding security at nuclear power plants, please refer to <https://www.nrc.gov/security/faq-security-assess-nuc-pwr-plants.html> and <https://www.nrc.gov/security/faq-force-on-force.html>.

3. "Does the reduction of inspections and oversight for reactor safety and security within the NRC ROP also correspond with the diminishing of the agency's enforcement capabilities?"

NRC Response: No. NRC efforts to better risk-inform and performance base the ROP through ROP enhancement has no impact on NRC's enforcement capabilities. The proposed modest reduction in the baseline inspection program is as a result of a thorough review of existing inspection samples and frequencies by an experienced team of NRC inspectors. The team looked for ways to optimize the inspection program based on experiences gained over the last several years of ROP implementation and industry trends. The aim of this effort was to ensure

that inspectors are inspecting in the right areas using the appropriate amount of resources. Doing so enables NRC inspectors to be more effective towards evaluating licensee performance. The enforcement policy and associated enforcement manual were unaffected. In the event a licensee performance deficiency is identified, both the ROP's significance determination process and the enforcement policy work together to determine the NRC's response to the performance deficiency.

Communicating with the NRC staff

At the start of all ROP public meetings, the project manager provides contact information for the public to use to provide their name as a participant in the meeting. This contact information is also provided for submitting questions and comments to the NRC technical staff. Please note that any questions and/or comments pertaining to the ROP enhancement project can be sent to Tekia.Govan@nrc.gov or Russell.Gibbs@nrc.gov. Questions and/or comments will be forward to the appropriate NRC staff.

Conclusion

At the end of the meeting, NRC and industry management gave closing remarks. NEI expressed appreciation for the open dialogue and willingness of NRC staff to hear industry views, even in areas where NRC staff and industry may not be aligned. The NRC management stressed the importance of NRC being focused on providing reasonable assurance of public health and safety when considering changes to the ROP.

The enclosure provides the attendance list for this meeting.

Enclosure:
As stated

SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC
MEETING ON OCTOBER 23, 2019 DATED

DISTRIBUTION:

RidsRgn1MailCenter
RidsRgn2MailCenter
RidsRgn3MailCenter
RidsRgn4MailCenter
RidsNrrOd
RidsNrrDros
RidsNrrDrosIrab
RidsNrrDrosIrib
RidsNrrDrosIrgb
RidsOpaMail
RidsNrrDraAphb
RidsACRS_MailCTR
RidsOgcMailCenter

ADAMS Accession No.: ML19312B408*** = via email**

OFFICE	NRR/DRO/IRSB/PM	NRR/DRO/IRSB*	NRR/DRO/IRAB/BC*
NAME	TGovan	BCurran	AMasters (DAird for)
DATE	11/06/2019	11/06/2019	11/07/2019

OFFICIAL RECORD COPY

Enclosure