

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

December 18, 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 NOVEMBER 20, 2019

On November 20, 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**

The NRC staff provided a summary of the Phase 2 ROP enhancement initiatives in the areas of significance determination process, radiation protection, cross cutting issues effectiveness review, security, independent spent fuel storage installation inspections, and emergency preparedness. It was announced in the October 2019 ROP monthly meeting 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.

Significance Determination Process (SDP)

The NRC staff provided a synopsis of continuing activities in the SDP area. The evaluation of the interactions under the current Inspection Finding Review Board (IFRB) process was discussed. The NRC staff continues to evaluate this area to determine if guidance enhancements for interactions between licensees and the NRC are necessary. The staff also discussed working with industry and other interested parties to improve assessment tools and processes in the areas of common-cause failure (CCF) and human reliability analysis (HRA). A

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pilot that provides an option for licensees to provide justification for unique CCF defense strategies began in April 2019 and will continue for a period of one year. Work to finalize the HRA tool to appropriately assess human error probabilities is ongoing. A workshop on this topic was held between the NRC's Office of Nuclear Regulatory Research and the Electric Power Research Institute on December 3-5, 2019 and will result in a draft report scheduled to be available by the 2<sup>nd</sup> quarter of 2020.

#### Radiation Protection

The NRC staff provided background and status of proposed changes to the radiation safety inspection procedures. As part of its ROP Enhancement Phase 2 efforts, the staff is proposing to change the frequency of inspections in the areas of radioactive effluents and radiological environmental monitoring programs, and to introduce inspections to provide risk-informed, performance-based oversight of performance in securing Category 1 and Category 2 radioactive material per 10 CFR Part 37. The staff has held two public meetings (May 30, 2019 and July 23, 2019) to seek input and feedback from external stakeholders on the proposed changes. The staff has also applied the input from stakeholders in its independent decision-making process to improve the efficiency of the radiation protection inspection program, while maintaining effective oversight of this area. The NRC staff plans to notify the Commission of these proposed changes prior to the currently scheduled implementation date of January 1, 2020.

Changing the frequency of inspections in the effluent and environmental monitoring areas acknowledges that industry performance in this area is adequate in that 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 reasonably achievable guidelines established through 10 CFR Part 50, Appendix I 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 in regard to 10 CFR Part 37 performance would implement a long-term, risk-informed framework to provide oversight in this area. The NRC 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. During this meeting industry representatives asked staff if all 10 CFR Part 37 violations would be dispositioned under the Radiation Safety Cornerstones. The staff stated that violations of security-specific nature would not be dispositioned under the Radiation Safety Cornerstones of the ROP: however, if a 10 CFR Part 37 violation impacts radiological material security or control it would be appropriately dispositioned under the Radiation Safety Cornerstones of the ROP.

Finally, the NRC staff informed stakeholders that a draft updated version of inspection procedure 71124.08, "Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation," would be made public to support a public meeting that the NRC will host on December 18, 2019 from 11:00 am – 12:30 pm to discuss changes that impact the radiation safety cornerstones.

#### Cross Cutting Issues (CCI)

The NRC staff presented a status update of the CCI effectiveness review (ADAMS Accession No. ML19322A014) and discussed the team charter (ADAMS Accession No. ML19179A105) which contains references and additional information reviewed by the team. The presentation included a comprehensive discussion of the background and history of the CCI program within the ROP, the information and data reviewed by the team, and potential team conclusions and recommendations to improve the program. Due to the substantial amount of information provided and discussed, a follow-up public meeting is being planned for January 10, 2020, to receive feedback from the public and industry after several weeks to reflect on the information.

As a follow-up to the industry's presentation from the September ROP public meeting (ADAMS Accession No. ML19266A601) in which they asserted that the program thresholds are set at a level that allows licensees to identify and act on a developing trend before program thresholds are exceeded, the industry indicated that they would be prepared to discuss specific examples of this at the January 2020 public meeting. The team's CCI report is now expected to be issued in early 2020 and will form a part of the 2019 ROP assessment.

Finally, NEI representatives briefly mentioned a performance indicator frequently asked question (FAQ) was expected to be submitted in December 2019. The NRC staff anticipates that this FAQ will be introduced at the January ROP monthly meeting.

## Security

NRC management chartered two separate NRC teams to review Inspection Manual Chapter (IMC) 0609, Appendix E, "Part I and II Security Significance Determination Process (SDP) and the Baseline Security Inspection Procedures. The teams consisted of staff from NRC's Office of General Counsel, Office of Enforcement, Office of Nuclear Reactor Regulation, Office of Nuclear Security and Incident Response and the Regional Security Inspectors. The staff provided historical data on their completed review which included the following:

- IMC 0609, Appendix E, "Part I Security Significance Determination Process (SDP)" was revised based on input from internal and external stakeholders. The revised version was issued on September 18, 2018.
- Security Inspection procedures were revised based on input from internal and external stakeholders. The revised inspection procedures were implemented on January 1, 2019.
- In response to SRM-SECY 17-0100, "Security Baseline Inspection Program Assessment Results and Recommendations for Program Efficiencies," the staff submitted COMSECY 19-0006 on a revised security inspection program framework with emphasis on the FOF inspection program and SECY 19-0055 on crediting operators' actions and law enforcement response.

Currently, all major changes to security inspection and assessment program are placed on hold pending Commission direction. However, the NRC staff will be making incremental changes based on insight gained during implementation of the revised inspection and assessment program.

#### Independent Spent Fuel Storage Installation (ISFSI)

The NRC staff provided an update on the overall status of the proposed ISFSI program recommendations. The staff discussed the status of the internal reviews and the upcoming public meeting that was held on December 2, 2019. The staff also presented the timeline for the activities that will follow as a result of the internal reviews and concurrence, and information gathered from the public meeting. The staff plans to communicate the final recommendations by February 2020.

## 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 on November 21, 2019.

Additionally, the NRC staff is waiting on the resubmittal of NEI White Paper, "Implementing a 24-Month Frequency for Emergency Preparedness Program Reviews\*," in support of 10 CFR 50.54(t) and hope to be able to discuss this paper at the January ROP monthly meeting.

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.

\*Shortly after the meeting, NEI resubmitted their White Paper, "Implementing a 24-Month Frequency for Emergency Preparedness Program Reviews\*," in support of 10 CFR 50.54(t).

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

The NRC staff is preparing to issue revisions to IMC 0609, Appendix A, "The Significance Determination Process for Findings at Power" and IMC 0609, Attachment 4, "Initial Characterization of Findings." The staff notified the NRC Commission of the update to the IMCs via a Commission Assistants note on December 6, 2019 and the IMCs will be effective on December 20, 2019.

NEI and other industry representatives provided additional thoughts and concerns with the proposed revisions to IMC 0609, Appendix A, and its characterization of FLEX findings. The industry requested, and the NRC staff agreed to consider whether having further interactions with the industry and other stakeholders using hypothetical findings to exercise the IMC and its assessment of FLEX findings would be beneficial. During this discussion, the NRC staff reiterated, and industry agreed that FLEX equipment should be treated consistently in the regulatory process. Specifically, if the industry is seeking credit for the safety benefits of FLEX

equipment in different aspects of plant operations and licensing, then there should be a commensurate regulatory action for a FLEX performance deficiency.

## Follow Up Questions from the November 14, 2019 Public Workshop on Inspection Procedure 71111.21N.02

The NRC staff shared that a public workshop to discuss the new Inspection Procedure (IP) 71111.21N.02, "Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements," was held on Thursday, November 14, 2019, in NRC's Region II offices in Atlanta, GA. The NRC staff indicated that they will be holding another public workshop on new IP 71111.21N.02 in the near future. The staff also indicated that they were developing minor/more-than-minor examples specific to the power-operated valve inspection and would make them publicly available in an upcoming revision to IP 71111.21N.02.

The NRC staff was asked by industry if they were open to holding other public workshops on IP 71111.21N.02 based on Regional Utility Group interests for a workshop to be held in a specific regional office. The NRC staff indicated that they were open to this suggestion and would use industry input to help determine the location for the next public workshop.

Industry representatives also asked if the IP 71111.21N.02 would be revised to describe the expected levels of communications between NRC inspectors and licensee staff during power-operated valve inspections. The NRC staff indicated that they would not have such description in the inspection procedure. It should be noted that a similar question on licensee and NRC inspection staff communications, particularly when the licensee disagrees with an inspector, was asked during the August ROP monthly public meeting. At that time, NRC management discussed the expected levels of communication between NRC staff and licensees. The expectation is that licensees address any disagreements with the NRC inspection team leader, then the NRC regional Branch Chief responsible for the inspection, before raising the issue to the NRC regional division management. This method allows an issue to be resolved at the lowest level possible while maintaining the factual information regarding any disagreements.

#### Response to Question from Members of the Public

During the meeting, a question was asked on whether NRC would increase inspections in areas that were determined to be of higher safety significance. This question was raised in light of the NRC staff's recommendations to reduce the inspection samples required in some inspection procedures – refer to SECY-19-0067 issued on June 28, 2019. As part of ROP Enhancement, these adjustments were recommended after a comprehensive review was performed by highly experienced inspectors taking into account NRC inspection experiences and safety improvements at the sites since the ROP began in 2000. One specific example where inspection samples were recommended to be increased is fire protection. Inspections of various aspects of ISFSI operations and 10 CFR Part 37 radiological inspections are examples where a reallocation of inspector focus are being recommended. Overall these small adjustments will provide more flexibility to the inspectors for pursing more risk significant issues and will not affect the NRC's ability to provide effective oversight to protect public health and safety and the environment.

To further address this question, it is important to understand that the ROP Baseline Inspection Program is a living program – one where adjustments have been made since the ROP began as part of the ROP Self-Assessment Process (IMC 0307). These changes have typically involved

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situations where new or different information has been made available. The primary inputs for this information are insights gained through inspections and operating experience. Good examples are the adjustments made as a result of 9/11 and more recently FLEX inspections associated with licensee mitigating strategies implemented after the Fukushima accident. Another example is the changes to engineering inspections, having the inspectors look at new areas such as environmental qualification programs. It is also important to acknowledge that although the ROP inspection program is more prescriptive and comprehensive than the former Core Inspection Program, it is essential that a degree of inspector flexibility is maintained to enable inspectors to better focus their time as necessary on urgent or more important matters. The inspection program procedures include risk-informed inspectable areas with a designated range of inspection samples to be performed. This range of samples gives inspectors the needed flexibility to perform their inspections in the most efficient and effective manner based on plant conditions and the wide range of issues to be pursued while staying focused on being risk-informed and performance-based. Therefore, small adjustments to inspection samples and certain inspection frequencies, as was recommended in SECY-19-0067, continue to support inspectors in this regard.

#### 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 <a href="mailto:Tekia.Govan@nrc.gov">Tekia.Govan@nrc.gov</a> or <a href="mailto:Russell.Gibbs@nrc.gov">Russell.Gibbs@nrc.gov</a>. 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 A. Masters - 7 -

SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC MEETING ON NOVEMBER 20, 2019 DATED

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\* = via email

OFFICE	NRR/DRO/IRSB/PM	NRR/DRO/IRSB	NRR/DRO/IRAB/BC
NAME	TGovan	BCurran*	AMasters*
DATE	12/16/2019	12/17/2019	12/18/2019

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## LIST OF ATTENDEES

## REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC MEETING

## November 20, 2019, 9:00 AM to 12:00 PM

## Teleconference

Name	Organization	Name	Organization
Danny McGinnis	Dominion Energy	Marlone Davis	NRC
Terry Reis	SNC	Jeff Mitman	NRC
Jim Slider	NEI	Eric Bowman	NRC
David Mannai	PSEG Nuclear LLC	Daniel Merzke	NRC
Larry Parker	STARS Alliance	CJ Fong	NRC
Edwin Lyman	Union of Concerned Scientists	Eric Schrader	NRC
Marty Murphy	Xcel Energy	Russell Gibbs	NRC
Shannon Rafferty-Czincila	Exelon	Carmen Rivera	NRC
Mandy Halter	Entergy	Tekia Govan	NRC
Jim Polickoski	TVA	Micheal Smith	NRC
David Gudger	Exelon	Ross Telson	NRC
Tony Zimmerman	Duke	Antonio Zoulis	NRC
Jon Johnson	TVA	Phil McKenna	NRC
Greg Halnon	First Energy	Anthony Masters	NRC
Rob Burg	EPM	Alonzo Richardson	NRC
Larry Nicholson	Certrec	Robert Krsek	NRC
Steven Dolley	Platts	Tom	NRC
•		Hipschman	
		Russ Felts	NRC
		Jeff Bream	NRC
		John Cassidy	NRC
		Ray Azua	NRC
		Harry Freeman	NRC
		Steven Garry	NRC
		John Hughey	NRC
		Stephanie Morrow	NRC
		Bob Kahler	NRC
		Mohammed Shuaibi	NRC
		Don Johnson	NRC
		Don Helton	NRC
		Rob Burg	NRC
		Charles Murray	NRC
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