

# **UNITED STATES NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

October 21, 2019

MEMORANDUM TO: Anthony D. Masters, Chief

Reactor Assessment and Human Factors Branch

Division of Reactor Oversight

Office of Nuclear Reactor Regulation

FROM: Tekia V. Govan, Project Manager /RA/

ROP Support and Generic Communication Branch

Division of Reactor Oversight

Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS MONTHLY

PUBLIC MEETING HELD ON SEPTEMBER 25, 2019

On September 25, 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.

### **Significance Determination Process Updates**

The NRC staff provided a status of the revisions to Inspection Manual Chapter (IMC) 0609. Appendix A, "The Significance Determination Process for Findings At Power" and IMC 0609, Attachment 4, "Initial Characterization of Findings." Drafts of these documents were made publicly available prior to the July 31, 2019 meeting under ADAMS Accession Nos. ML19198A183 and ML19198A195, respectively. After considering inputs from industry, other external stakeholders, and members of the public, the NRC staff refined the screening questions in IMC 0609, Appendix A, Exhibit 2. These changes also took into consideration documented operating experience. The NRC staff will continue to monitor performance of Diverse and Flexible Mitigation Capability (FLEX) equipment to ensure appropriate treatment in the significance determination process (SDP). Further, the staff engaged in a dialogue with industry concerning the treatment of FLEX performance deficiencies when performing a detailed risk evaluation. The staff stated that it will use the standardized plant analysis risk (SPAR) models to assess the significance of FLEX findings using IMC 0609, Appendix A, similar to how they were evaluated under IMC 0609, Appendix O, "Significance Determination Process for Mitigating Strategies and Spent Fuel Pool Instrumentation." In addition, the staff has the option

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to use IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," for FLEX findings if needed. The current NRC SPAR models have been updated to include credit for FLEX as outlined under the Mitigating Strategies Orders (EA-12-049, EA-12-051, and EA-13-109). FLEX is credited in the models only if the site experiences an extended loss of offsite power with a complete loss of onsite emergency power, successful injection into the reactor vessel (boiling water reactors) or steam generators (pressurized water reactors), successful depressurization, and no loss of coolant accident. Additional information about how FLEX is credited in the SPAR models was presented at the 2019 Regulatory Information Conference and is available online at <a href="https://www.nrc.gov/public-involve/conference-symposia/ric/past/2019/docs/abstracts/sessionabstract-34.html">https://www.nrc.gov/public-involve/conference-symposia/ric/past/2019/docs/abstracts/sessionabstract-34.html</a>. The NRC staff expects to issue the revised IMC 0609, Appendix A, and IMC 0609, Attachment 4, in October 2019.

Additionally, the NRC staff highlighted key messages from a NEI letter entitled, "Request for Changes to the Significance Determination Appeal Process" (ADAMS Accession No. ML19261A190). In response to this letter, the NRC staff described the SDP, adding emphasis on the fundamental purpose of the SDP, and the outlined the opportunities for information exchange with the affected licensee throughout the process. The NRC staff also provided an illustration during the meeting that showed the opportunities for information exchange during the SDP (ADAMS Accession No. ML19263D136). Representatives from industry provided additional context regarding the development of the letter and reiterated the recommendations to improve the SDP appeals process.

#### **ROP Enhancement Updates**

#### Radiation Protection

The NRC staff informed the meeting participants that the proposed radiation protection inspection procedures are still under internal review and per Management Directive 8.13, the staff will notify the NRC Commission of any ROP enhancement, Phase 2, radiation protection oversight program-related changes prior to implementation. Additionally, the staff stated that the inspection procedure are expected to be issued in January 2020.

#### Emergency Preparedness (EP)

The NRC staff are revising 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.

Additionally, the NRC staff indicated that two NEI White Papers are under review and updates will be provided during the next October 2019 ROP meeting.

Independent Spent Fuel Storage Installation (ISFSI)

The NRC staff provided further insights into some of the recommendations documented in their memo to NRC management for ISFSI inspections. The staff plans to hold a public meeting to discuss the recommendations in November 2019.

### Significance Determination Process (SDP)

The NRC staff discussed the evaluation of the interactions under the current Inspection Finding Review Board process. The staff will continue to evaluate this area to determine if guidance enhancements for interactions between licensees and the NRC are necessary and will do so as part of their continuous assessment of ROP performance. 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). In April 2019, that staff will develop a pilot that will provide an option for licensees to justify unique CCF defense strategies began. This pilot will continue for a period of one year. The staff also noted that during a public meeting in December 12, 2018, industry suggested they would provide some examples of unique defense strategies used by licensees to reduce the likelihood of CCFs. However, the staff noted that while those would be beneficial and helpful in evaluating CCF issues, industry has not yet provided any examples. Work to finalize the HRA tool to appropriately assess human error probabilities is ongoing and will result in a publicly available report expected by the end of 2019. The staff also discussed internal efforts to increase the familiarity and use of SPAR models and the associated plant reliability information books by inspectors for inspection planning and initial screening of issues.

#### Problem Identification and Resolution (PI&R)

The NRC staff gave a brief overview of changes being considered by the PI&R team in procedure restructure and assessment of licensee's PI&R program. There are four areas being considered under assessment of the PI&R program and the staff has developed objective criteria in each of these areas. A PI&R public meeting is being planned for November 2019 to provide additional details on this topic.

#### Cross Cutting Issues (CCI)

The NRC staff provided a status update of the ongoing cross-cutting issues effectiveness review, which is being conducted to satisfy both the IMC 0307 ROP assessment process and to disposition some ROP enhancement recommendations (ADAMS Accession No. ML19263G162). Following the staff's presentation, NEI presented their perspectives on the cross-cutting issues program. The industry indicated that the program, as currently implemented, is successful because the increased thresholds rolled out in 2015 provided licensees with time to see a developing trend and take actions to address it before cross-cutting thresholds are met and regulatory response is necessary. The industry noted that licensees typically begin responding to cross-cutting trends at 50% of the program thresholds. The industry also expressed support for the required three consecutive assessment periods for a theme to be present before a cross-cutting issue is opened, as this allows time for corrective actions to be put in place and take effect. There was also discussion about inspection findings being a high-level indicator of cultural performance. Licensees have an immense amount of low-level detailed data available to analyze and reveal trends ahead of any trends revealed by inspection findings. For this reason, the industry noted that the cross-cutting issues program can never really be a leading indicator for licensees when compared to the low-level data available to them. The industry provided feedback on this topic in the form of a presentation which is available in ADAMS under Accession No. ML19266A601.

Ed Lyman from the Union of Concerned Scientists questioned whether the NRC staff had any further insights as to why there was a decreasing trend in cross-cutting issues, even if the

pre-2015 program criteria were carried forward to today. The data that Mr. Lyman was referring to was discussed at the August ROP monthly public meeting and is available in ADAMS under Accession No. ML19238A042. The NRC staff noted that their review is ongoing, but it certainly would appear that the overall decreasing trend in inspection findings is at least one likely contributor.

The NRC staff will provide an additional update on the cross-cutting effectiveness review effort at the October ROP public meeting, followed by plans to discuss the outcome of the review at the November ROP public meeting.

#### **ROP Enhancement Feedback from the NRC's Regional Advisory Panel**

The NRC's Regional Advisory Panel (RAP) members provided brief remarks regarding the region's roles in the ROP enhancement process. The RAP members provided insight into the interactions that take place between the NRC staff at headquarters and regional staff, while highlighting the various opportunities that each region has provide input in to the direction of the thematic areas under the ROP enhancement project.

#### **Engineering Inspection Program Updates**

The NRC staff stated that the inspector training on the new power operated valve inspection procedure has begun and offered to hold public workshops on the new procedure.

#### White Paper on Drill Exercise Performance Indicator

Prior to this meeting, NEI submitted a White Paper entitled, "Counting of DEP Opportunities from an Actual Emergency Following a Retraction of the Emergency Declaration." NEI provided an overview of the white paper, with the expectation that the NRC staff will review the paper in detail and provide a response. The NRC staff expects to discuss this paper at the October ROP monthly meeting.

## **Meeting Frequency and Document Availability**

The NRC staff and NEI discussed the frequency of the ROP monthly meetings and the availability of documents prior to each meeting. It was noted that as the 2020 ROP meetings are scheduled, it may be possible to move from monthly meetings to a meeting every other month. NEI and the NRC staff will take this into consideration when developing the meeting schedule for 2020. The NRC staff also committed to have all documents, whether generated internally and externally, posted on the NRC's public web page five days prior to the public meeting.

#### Follow-up Action from Previous Meeting

Request to provide NRC's programmatic lessons learned for environmental qualifications (EQ) inspections.

The NRC staff has developed lessons learned from its implementation of Inspection Procedure (IP) 71111.21N, "Design Bases Assurance Inspection (Programs)" (ADAMS Accession No. ML19183A063). The lessons learned, and actions were developed based on input received from licensees, Office of Nuclear Reactor Regulation (NRR) staff, and staff in all four regions.

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The staff will use this information in the development and implementation of future attachments to IP 71111.21N which will replace EQ inspections in future inspection cycles.

## 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

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SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC MEETING ON SEPTEMBER 25, 2019 DATED

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ADAMS Accession No.: ML19291D631 \* = via email

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NAME	TGovan	AMaster (PMcKenna for)
DATE	10/17/19	10/21/19

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### **LIST OF ATTENDEES**

## REACTOR OVERSIGHT PROCESS MONTHLY PUBLIC MEETING

September 25, 2019, 8:30 AM to 12:15 PM

## NRC One White Flint North 11545 Rockville Pike ACRS Conference Room Rockville, MD

Name	Organization	Name	Organization
Peter Hill	OH Dept of Public Safety	David Aird	NRC
Tracy St. Clair	First Energy Corp.	Carmen Rivera	NRC
Jim Slider	NEI	Stephanie Marrow	NRC
Lance Sterling	STP	Chris Miller	NRC
Larry Parker	STARS Alliance	Alex Garmoe	NRC
Edwin Lyman	Union of Concerned Scientists	Russell Gibbs	NRC
Marty Murphy	Xcel Energy	Stephen Campbell	NRC
Pia Jensen	Member of the public	Ami Agrawal	NRC
Stephanie Pyle	Entergy	Tekia Govan	NRC
Steve Catron	NextEra	Joylynn Quinones	NRC
Jeffrey Humphreys	NJ Dept of Environmental Protection	Ray Azua	NRC
Bridget Frymire	NY Dept of Public Safety	Don Johnson	NRC
Justin Wearne	NEI	Carla Roque-Cruz	NRC
Francis Possessky	PSEG	Dan Merzke	NRC
Terry Reis	SNC	Alonzo Richardson	NRC
Robin Ritzman	Curtiss Wright	Antonio Zoulis	NRC
Gary Miller	Dominion Energy	Jimi Yerokun	NRC
David Gudger	Exelon	Mohammed Shuaibi	NRC
Maggie Staiger	NEI	Ravi Grover	NRC
Abhijit Sengupta	DOE	John Hughey	NRC
Anthony Leshinskie	VT Government – Public Service Department	Robert Krsek	NRC
		Phil McKenna	NRC
		Anthony Masters	NRC
		Matt Humberstone	NRC
		Tom Hipschman	NRC
		Dave McIntyre	NRC
		Manuel Crespo	NRC
		Steve Cochrum	NRC
		Eric Schrader	NRC