



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

May 10, 2022

MEMORANDUM TO: Antonios Zoulis, Chief
PRA Oversight Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

A handwritten signature in blue ink, appearing to read "Edgardo Torres".

Signed by Torres, Edgardo
on 05/10/22

FROM: Edgardo Torres, Reliability and Risk Analyst
PRA Oversight Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF APRIL 5, 2022, PUBLIC MEETING TITLED
SECOND PRA CONFIGURATION CONTROL WORKSHOP
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION
AND INDUSTRY STAKEHOLDERS

On April 5, 2022, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting between the NRC, industry stakeholders, and other interested parties. The Comment – Gathering type meeting was conducted virtually. The meeting notice is available in the Agencywide Documents Access and Management System (ADAMS), at Accession Number ML22069B081. The NRC presentation used to facilitate the discussion during the meeting is available in ADAMS at Accession Number ML22094A198. The list of meeting participants is provided as an enclosure to this document. The staff received no public meeting feedback forms related to this meeting.

During the meeting the staff updated industry and other interested parties on the efforts to develop an oversight footprint in PRA Configuration Controls. The staff discussed the details of the information gathering and guidance development effort (tabletops), as the process the staff will use to inform recommendations; the staff sought feedback to inform the information request to execute the tabletops; and answered questions and concerns from industry representatives. Details on the topic, comments and feedback received are described on the following pages. The meeting was approximately 1.5 hours in length.

Enclosures:
List of Meeting Attendees

CONTACT: Edgardo Torres, NRR/DRA
301-415-0705

February Public Workshop Take-Aways

The NRC provided answers to two questions from the February 2nd PRA Configuration Control Workshop that were unaddressed.

No questions, comments or feedback were received during this part of the workshop.

Information Gathering and Guidance Development Update

The NRC staff discussed the information it deemed necessary to support the tabletops at licensed facilities. The staff indicated that information request will be from with existing, readily available information. The information request includes the following:

- Procedures for implementation of the PRA Configuration Control program
- Procedures for change control of inputs to the PRA Configuration Control program
- PRA Notebooks - Staff to identify PRA-specific documentation based upon targeted review of licensee applied risk-informed applications and scope of PRA changes
- Licensed operator lesson plans for top 10 risk-significant systems based on risk achievement worth (RAW) and Fussel-Vesely (FV) for each approved hazard group model
- Copies of the last two PRA model-of-record (MOR) updates CDF awareness summaries to site management or an initiating event percent distribution chart
- List of components and operator actions basic events for CDF and LERF based on RAW and FV from the current and prior MOR update. Provide similar information for additional approved hazard group models. Include the below importance measures.
 - FV
 - RAW
 - Birnbaum (BI)
- List of top 20 baseline dominant sequences and associated top 50 cut sets from current and prior MOR. Provide similar information for additional approved hazard group models.
- Basic events nomenclature information to understand association to components/human events used in PRA
- List of PRA Configuration Control updates (maintenance/upgrade) evaluations or model change log/tracking changes software, from the prior through current MOR update period for all approved hazard group models
- Pending changes from model change logs/tracking change software to the current MOR and additional approved hazard group models.
- List of high priority (i.e., I, II, III) condition reports (CRs) or action request (AR) from the prior through current MOR update.
- List of changes from the following areas from the prior through current MOR update:
 - Design/Engineering changes (Fully/Partially Installed)
 - EOP, AOP, SOP changes
 - Tracking and control of systems, structure and components (SSCs) unavailability hours data for top 50 risk-significant components, based on FV and RAW, per approved hazard group
 - Tracking and control of SSC reliability data for 50 risk-significant components, based on FV and RAW, per approved hazard group
 - Plant and industry operating experience from the prior through current MOR update

Industry representatives noted that providing previous model information would be difficult to obtain, specifically, for fire internal hazard model because of changes implemented to computer codes. One alternative presented by industry was to review quantification notebooks from the previous version and the current version to fulfil the intent of the information request, which would include most risk-significant systems. Additional feedback provided by industry was related to explaining the sampling strategy as it relates to the PRA Configuration Control process; maintaining focus on significant changes; inputs driving current PRA hazard groups changes; challenges with associating supporting requirements to inputs not incorporated as a maintenance or upgrade; and the number of records reviewed as part of PRA Configuration Control program.

The NRC staff conveyed its plans to take the industry feedback into consideration as the staff continues to work with industry to achieve a balanced approach in providing oversight to ensure PRA Configuration Control.

Closing Remarks

The public was given an opportunity to provide additional comments or questions, and no one chose to do so. NEI representative stated that industry will document the most valuable items for the NRC to look at from their perspective to complete the tabletops. The NRC DRA Deputy Division Director then thanked the participants for the discussion and conveyed that additional outreach efforts would continue as we proceed with this initiative. The meeting was then adjourned.

SUBJECT: SUMMARY OF APRIL 5, 2022, PUBLIC MEETING TITLED SECOND PRA CONFIGURATION CONTROL WORKSHOP BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND INDUSTRY STAKEHOLDERS
Dated: May 10, 2022

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OFFICE	NRR/DRA/APOB	NRR/DRA/APOB
NAME	ETorres	AZoulis
DATE	5/10/2022	5/12/2022

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LIST OF MEETING ATTENDEES

Attendee	Affiliation
Torres, Edgardo	NRC
Pressley, Lundy	NRC
Thomas, Andrew	NRC
Caponi, Louis	NRC
Raleigh, Deann	
Clint Alday (Guest)	
Burgess, Nick	
Jacobson, Ronald G.	
Dolan, Bradley Wicker	TVA
Gary DeMoss	PSEG
A Quaderer	Energy Harbor
Degonish, Matthew M	Westinghouse
Larry Nicholson	
Browne, Eric Vaughan	
Corey M Wilson	
Anderson, Victoria	NEI
Varnedoe, Jennifer Maye	
Bream, Jeff	NRC
Loyd, Suzanne	Constellation Nuclear
Khanna, Meena	NRC
Matheny, Tara Elizabeth	
Patel, Vish	
Parsley, Edward	
Julka, Anil K.	NextEra
Creighton S Adsit	
Ratnagar, Benny J.	
Jeong, Beomhee	
Lipetzky, Andrew Charles	
Hope, Kyle D	
Burg, Rob	
Meier, Peter	
Vanover, Donald	
Stone, Jeffrey L	Constellation Nuclear
Steven Pope	
De Rego, Christopher	
Gilbertson, Anders	NRC
Hijack, Paul J.	
Hanna, John	NRC
Stoesz, Alex P.	

Olson, Ole H.	
Zach, Andrew	EPW
Tennant, Ryan C:	Constellation Nuclear
Zoulis, Antonios	NRC
Arner, Frank	NRC
Werkheiser, David	NRC
Robert Drsek	Energy Harbor
Daniel Weller	Energy Harbor
Deese, Rick	NRC
Paul Sicard	Entergy
Harry Balian	PSEG
Mohamed M. Talaat	
Rishel, Robert I	Duke Energy
Mironenko, Artur N	
Maioli, Andrea	Westinghouse
Seeman, Glen A	GE
Jason Hall	
Coyne, Kevin	NRC
Rick Stremple	Energy Harbor
Krsek, Robert	NRC
Boatwright, Walter	
Szews, Heather Davis	
Presley, Mari	EPRI
Weerakkody, Sunil	NRC
Beckton, Joshua S	
Ratchford, Andy	NRC
Sandal, Shane	NRC
Rosebrook, Andy	NRC
Hiller, Justin W	NRC
Jason Purvis	
Loveless, David	NRC
Hughey, John	NRC
Garmon-Candelaria, David	NRC
Kichline, Michelle	NRC
John Pfabe	