



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

August 19, 2024

MEMORANDUM TO: Reinaldo Rodriguez, Acting Chief
PRA Oversight Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

FROM: John Hanna, Senior Reactor Analyst
PRA Oversight Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

A handwritten signature in blue ink, appearing to read "Alex Garmoe".

Garmoe, Alexander signing
for John Hanna, on 08/19/24

SUBJECT: SUMMARY OF JULY 17, 2024, STATUS OF RISK EVALUATION
GUIDANCE UPDATES DEVELOPED BY GREATR (GROUP FOR
RISK EVALUATION AND ASSESSMENT TOOLS REVIEW)

On July 17, 2024, the U.S. Nuclear Regulatory Commission (NRC) staff held an observation public meeting with the Nuclear Energy Institute (NEI) and industry to continue the discussions between the NRC staff, industry stakeholders, and the public regarding ongoing work on the GREATR initiative. This meeting offered an opportunity for the industry and public to gain familiarity and to provide feedback on the staff's modifications to the Diverse and Flexible Coping Strategies (FLEX) factor modelling for onsite and offsite power recoveries, as well as solutions for more detailed initiating event assessment simulations and changes to the Risk Assessment Standardization Project of Operational Events volume 1 handbook.

The presentation materials for the public meeting are available in the Agencywide Documents Access and Management System (ADAMS) under the following Accession Numbers: NRC Presentation (ML24197A057) and NEI presentation (ML24197A065). The public meeting announcement is available in ADAMS (ML24185A244). A list of attendees is included in Enclosure 1. The details of the meeting and discussion points are contained in Enclosure 2.

As of the date of this summary, the Public Meeting Feedback System has not received any feedback.

No regulatory decisions or commitments were made at the meeting.

Please direct any inquiries to Mr. John Hanna at 404-387-3910 or by email at John.Hanna@nrc.gov.

Enclosures:

1. List of Attendees
2. Meeting Details

SUBJECT: SUMMARY OF JULY 17, 2024, STATUS OF RISK EVALUATION GUIDANCE
UPDATES DEVELOPED BY GREATR (GROUP FOR RISK EVALUATION AND
ASSESSMENT TOOLS REVIEW) DATED: 8/19/2024

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JHanna, NRR

AGarmoe, NRR

ADAMS Accession No.: ML24221A158 *by e-mail NRR-106

OFFICE	NRR/DRA/APOB	NRR/DRA/APOB/BC*
NAME	JHanna	RRodriguez
DATE	8/19/2024	8/19/2024

OFFICIAL RECORD COPY

LIST OF ATTENDEES

**JULY 17, 2024, PUBLIC MEETING WITH NUCLEAR ENERGY INSTITUTE AND OTHER
INDUSTRY STAKEHOLDERS ON THE STATUS OF RISK EVALUATION GUIDANCE
UPDATES DEVELOPED BY GREATR (GROUP FOR RISK EVALUATION AND
ASSESSMENT TOOLS REVIEW)**

Alex Garmoe	NRC
John Hanna	NRC
Antonios Zoulis	NRC
Dolan, Bradley Wicker	Tennessee Valley Authority (TVA)
Ballard, John David	Tennessee Valley Authority (TVA)
Loyd, Suzanne	CONSTELLATION
Carr, Michelle	APS
Daniel Geary	NRC
Linthicum, Roy R	CONSTELLATION
Galvan, Bryan	PGE
Lundy Pressley	NRC
Carroll, Bryan C	DUKE-ENERGY
McDonald, Jeffrey A	TVA
Ratchford, Andy	JENSEN-HUGHES
Gore, Jonathan David	TVA
Latonia Enos-Sylla	NRC
Kasi Rhodes	DTEENERGY
Erick Ball	NRC
Mehdi Reisi Fard	NRC
Hudson Molly	STPEGS
Gilbreath, Jeremiah A.	SOUTHERN
Shepard, Matthew	PGE
Cymbor, Michael	APS
Rapp, Douglas	VISTRA
Rishel, Robert I	DUKE-ENERGY
Haro, Xavier	CONSTELLATION
Vincent, Keith	FPL
John Lane	NRC
Hiller, Justin W	AMEREN
David Gennardo	NRC
Degonish, Matthew M	AMEREN
Kindred, Gerry Wane	TVA
Karten, Luke	FPL
Michelle Kichline	NRC
Stringfellow, Joseph	FPL
Sietze Rotton	NRC

Ferrante, Fernando	EPRI
Palenzuela, Jadie	FPL
Sisco, Carlos	WINSTON
Joel Jenkins	NRC
Meena Khanna (She/Her/Hers)	NRC
Christopher Hunter	NRC
Nicholson, Mark Andrew	TVA

MEETING DETAILS

JULY 17, 2024, PUBLIC MEETING WITH NUCLEAR ENERGY INSTITUTE AND OTHER INDUSTRY STAKEHOLDERS ON THE STATUS OF RISK EVALUATION GUIDANCE UPDATES DEVELOPED BY GREATR (GROUP FOR RISK EVALUATION AND ASSESSMENT TOOLS REVIEW)

PURPOSE

The purpose of this meeting is to provide an update of ongoing work by the GREATR staff and offer an opportunity for questions and comments.

Meeting Details

Opening remarks begin with a statement by the U.S. Nuclear Regulatory Commission (NRC) that three draft resolutions are to be presented, and the NRC presentation (ML24197A057) is shown. The Nuclear Energy Institute (NEI) representative opens with statement expressing strong interest in the topics, emphasizing efficiency, realism, clarity, predictability, and uniformity of significance determination (SDP) and oversight processes.

An overview of the project's charter's purpose is shown and stakeholders are listed, as well as the recently completed tasks, such as FLEX phase two. The first of the three issues, regarding Emergency Power System/offsite electrical power (OEP) modelling is introduced, with early events being treated different than later ones. New guidance is to be introduced regarding modelling the events, with there being "hard" and "easy" methods, and issues and approaches for a more dynamic PRA modelling method is brought up. Breakpoints for an offsite/onsite power scenario is shown, and FLEX application as well as plant specific and industry data organization/availability are discussed. A basic description of the hard and easy modelling methods are explained and discussed. The NRC consensus that current recovery models are overly optimistic is brought up, and this is discussed with NEI representatives.

The second issue brought up is regarding initiating event assessment and the lack of granularity for doing so. A proposed solution is shown with changes to the Risk Assessment Standardization Project (RASP) of Operational Events guidance manual and modifications to the assessment process matrix. Downsides to the solution are brought up and discussed. The NRC expresses intent to remove the requirement to hold a planning Significance and Enforcement Review Panel (SERP) for initiating event evaluations to improve SDP efficiency, given improved guidance for initiating event evaluations, and this plan is discussed.

An overview of the changes to the RASP volume 1 handbook is shown, with a focus and discussion on common cause failure modelling, as well as a mention of Human Error Probability floor values. Southern Nuclear Company introduces the desire for additional flexibility for PRA result threshold boundaries. NEI then begins their presentation (ML24197A065) on recommendations for the SDP process. Additional discussion on common cause failures and their failure models, as well as the desire for increased flexibility in differentiating green and white risk classifications.

Meeting concludes with the key takeaways that emphasizes the reduction of excess conservatism, transparent and frequent communication between the NRC and licensees, and

the further alignment of NRC and industry SPAR models. The industry requested additional engagement on common cause failure and the NRC plans to hold a public meeting in the future. Additionally, the NRC plans to share the draft RASP manual in a future ROP bimonthly meeting.