



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

December 2, 2022

MEMORANDUM TO: Lois James, Acting Chief
Licensing Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Ekaterina Lenning, Project Manager */RA/*
Licensing Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF NOVEMBER 8, 2022, MEETING WITH NUCLEAR
ENERGY INSTITUTE REGULATORY ISSUES TASK FORCE
(EPID L-2019-TOP-0044)

On November 8, 2022, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of the Nuclear Energy Institute (NEI) Regulatory Issues Task Force. The meeting was held in a hybrid format (i.e., attendance in-person, virtual, and teleconference) and all in-person attendees followed the guidance for visitors to NRC facilities on NRC-sponsored events. The purpose of the meeting was to discuss regulatory issues associated with licensing and oversight. The meeting notice is available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML22308A042, and the presentation slides are available in ADAMS under Accession No. ML22307A272. A list of attendees is enclosed to this memorandum.

The NRC staff began the public meeting with an introduction and explanation of logistical information. Mike King, Deputy Director of the Office of Nuclear Reactor Regulation for Reactor Safety Programs and Mission Support, NRC, and Brett Titus, Director, Licensing, NEI, provided opening and closing remarks. The topics discussed during the meeting are summarized below. At the end of the presentation, the public had an opportunity to ask questions of the NRC staff. No regulatory decisions were made during this meeting.

Innovation/EMBARC: Update on Mission Analytics Portal External

The NRC staff provided an update on Innovation/EMBARC Mission Analytics Portal External (MAP-X) that was created to empower stakeholders with a secure, flexible, and personalized self-service gateway to retrieve, submit, and interact with regulatory related information and assessment tools through a standard web browser. There are two active MAP-X Modules: 1) Web-Based Relief Requests (WRR) for proposed alternative under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z) (integrated into MAP-X as a module), and 2) Event Notification (Form 361 for power reactors, Form 361A for fuel cycle and materials, Form 361N for non-power reactors). Also, the NRC staff is developing licensee event reports (Form 366)

and general submission (similar to the NRC Electronic Information Exchange System General Form).

The NRC staff mentioned that there are several potential benefits for the external users of MAP-X that include: individual access from anywhere (not tied to a specific computer/physical location), email record/proof of submission, form field validation and auto-populated fields, ability to view/clone previous submissions, and security of the portal access and submission viewing (users can share sensitive or curated information due to the user credentialing and authentication).

The NRC staff also outlined the MAP-X benefits for the NRC including the benefits of receiving the information through the system as structured data rather than narrative text or attachments (as applicable), enhanced routing and availability of the information within the NRC and streamlined and monitored incoming data processes.

The NRC staff detailed the smarter web form format and its functions. The smarter web form includes clone function for forms, drop down lists, required fields, validation of data field formatting (dates, phone numbers), conditional input fields, ghost text to show expected input, auto population of fields based on user information, and the ability to expand or minimize parts of the forms.

In addition, the NRC staff described recent MAP-X progress mentioning that:

- The revised Relief Request/Proposed Alternative form was approved by the Office of Management and Budget (OMB) and is available for use.
- Based on the user feedback, several upgrades to improve the user experience with complex text inputs were made.
- Form 361N for the Non-Power Reactors was deployed.
- Upgrades to Form 361, 361A, and 361N were made and screen shots were submitted to OMB for approval and transitioned to a new MAP-X application development contractor.
- Revision 3 of MAP-X User Guide and MAP-X frequently asked questions (FAQs) are available now.
- "User Warning Banner" was added for information security.

The NRC continues upgrading MAP-X and plans to: 1) finish development of licensee event report module and request OMB clearance, 2) develop (with plans for future deployment) "General Submission" module, 3) continue MAP-X user experience improvements adapt application to be scalable to more forms/processes and more groups of the external users, 4) add more reporting/interactive functionality within the application for the NRC users, 5) upgrade MAP-X to enable intake sensitive (but not safeguard information or classified information) information, and 6) continue to explore possible future MAP-X modules (reactor operating licensing, fitness for duty, radioactive material shipments, etc.).

The NRC staff wrapped up the presentation with the following resources and tips for the current and future MAP-X users:

- Revision 3 of MAP-X Portal User Guide and Revision 3 of MAP-X Portal FAQs are available in ADAMS under the ADAMS Accession Nos. ML22290A106 and ML22290A107 respectively (ADAMS Package Accession No. ML22290A105).

- Users should be prepared to go through ICAM Level Gold credentialing to use MAP-X that requires both a recent photo and a photo identification (State Driver's License is acceptable) and follow the link <https://pki.nrc.gov/ecs/apps/gold/dcc-gold-wrr.html> to apply for credentialing.
- If there are any issues or questions, licensees should contact the NRC project manager, or contact MAP-X.resource@nrc.gov directly.
- Once the users are credentialled, they need to login to the portal <https://mapx.nrc-gateway.gov/> to become familiar with the application, roles/permissions, and the forms.
- The NRC also has a test environment for the credentialled users who want to explore and test out the system: <https://mapx-preprod.powerappsportals.us/>

The NRC encouraged the industry to provide feedback.

The NEI representatives stated that such tools that relieve administrative burden are very beneficial for the industry's future licensing submittals. They highlighted good communication between the NRC staff and licensees and more efficient reviews.

Discussion on Risk-informed Initiatives and Risk-informed Process for Evaluations

The NRC opened the discussion by stating that the staff meets monthly to discuss the status of ongoing risk-informed initiatives and reviews. The NRC staff also mentioned that the staff conducted many audits that were tailored to each review. The NRC staff emphasized the importance of early engagements and pre-application activities for the future submittals that will support efficiency and effectiveness of the applications and reviews.

The discussion was followed by the staff's presentation on the initial observations from completion of the first review performed using the Risk-informed Process for Evaluations (RIPE). The NRC staff provided a very high-level summary of a few best practices and recommendations to improve process implementation that the staff identified from the first review under RIPE. The NRC staff detailed how RIPE leverages previous risk-informed initiatives. In addition, the staff highlighted recent accomplishments (e.g., expansion of RIPE to allow technical specifications changes; guidance was issued in June 2022 (ADAMS Accession No. ML22088A140)) and outlined next steps that include implementation of best practices and recommendations from the first RIPE review and continuation of work with the Pressurized Water Reactor Owners Group on Risk Assessment Process for Topical Reports, which is a generic process for topical reports. The NRC staff indicated that the recommendations that resulted from the first use of RIPE are still under review and that, as needed, a separate public meeting, would be held to address those recommendations once the recommendations have been finalized.

In conclusion of the presentation, the NRC staff mentioned several potential benefits of RIPE that include focusing the NRC's and licensees' resources on the most safety significant issues, addressing low safety significance compliance issues in an efficient and predictable manner consistent with the NRC's Principles of Good Regulation, leveraging existing regulations and risk insights, and incentivizing the further development and use of probabilistic risk assessment models and applications.

The NEI and industry representatives indicated that the first RIPE review was very successful and conveyed that they would like to see more reviews completed under RIPE, prior to the NRC adjusting the process.

The NRC staff stated that all best practices and recommendations identified are currently being discussed internally, and that none of these recommendations would result in a significant change to the process. The NRC staff will conduct a separate public meeting, as needed, to discuss those recommendations once they are finalized. The NRC staff conveyed its plans to conduct a thorough lessons learned effort and issue a report of those best practices and recommendations upon the completion of additional reviews under RIPE.

The NEI representatives asked the NRC staff to share any insights of how industry could support RIPE. The NRC staff emphasized the importance of open discussions, early engagements, and pre-application activities for the future submittals, which would support NRC's resource planning and more efficient and streamlined reviews.

Request for Confirmation of Information process overview (LIC-115, "Processing Requests for Additional Information") and Discussion on Best Practices in Communications for the Review of Licensing Actions

The NRC staff provided a detailed overview of the Request for Confirmation of Information (RCI) process contained within the publicly available LIC-115, Revision 1, "Processing Requests for Additional Information" (ADAMS Accession No. ML21141A238), which became effective on August 9, 2021. The NRC staff provided RCI's process background and some examples from the NRC reviews. Additionally, the NRC staff explained the RCI characteristics and highlighted its potential efficiencies. The NRC staff also mentioned that the staff is looking for the opportunities to use RCIs in RIPE process. The Tennessee Valley Authority representative mentioned that RCI process was successfully used for the emergent request reviews.

As a continuation to the previous topic, NRC re-emphasized the importance of open communication and applicants' early engagement with the NRC when planning for future submittals. The NEI representatives stated that early communications with the NRC on future licensing submittals are very beneficial.

Discussion on Staffing, Budgeting, and Resources

The NEI opened the discussions with the question on the staffing and budgeting potentially impacting the reviews.

The NRC staff mentioned that the NRC typically focuses recruitment efforts on engineers, scientists, and security professionals. In addition, the NRC may use Direct Hire Authority (DHA) to recruit for certain hard to fill positions similar to competitive service agencies and appoint candidates directly, without use of standard hiring procedures (rating and ranking and veterans' preference). A DHA is an Office of Personnel Management hiring authority under Title 5 U.S.C. 3304 that allows Federal agencies to fill vacancies in the competitive service when a critical hiring need or severe shortage of candidates exists.

The NRC staff also noted that the NRC is seeing an increase in new reactors' licensing activities and reiterated that the early engagement with the NRC on the future submittals is essential to the NRC's resource planning. The NEI representatives stated that such dialogue should continue.

NRC Forthcoming Process Changes, Updates, and Improvements

The NEI representatives indicated that this topic should become a permanent topic on the agenda to discuss NRC forthcoming process changes, updates, and improvements.

Effort and Schedule Estimate Tool Overview

As a part of the discussion on the NRC forthcoming process changes, updates, and improvements, the NRC staff made a presentation on the NRC Effort and Schedule Estimate (EASE) tool.

The NRC staff provided detailed overview of the data tools to improve review estimates. The NRC staff explained and demonstrated via demo how the increased availability of data and analytic tools helps effectively visualize and assess the current and historical results, which, in turn, leads to the enhanced information available to internal and external stakeholders. The NRC staff explained and demonstrated via demo that EASE tool provides the NRC data needed to develop more accurate estimates and rapid access to licensing data to respond to internal and external requests which leads to more meaningful information available to applicants (www.nrc.gov/reactors/operating/licensing/resource-estimator.html). Additionally, graphical representation allows the NRC to quickly assess possible areas or projects of concern.

The NEI representatives stated that such tool that relieves administrative burden is very beneficial for the industry's planning and budgeting for the future licensing submittals. They highlighted good communication between the NRC staff and licensees and more efficient reviews.

Status of Radioactive Source Security and Accountability Rulemaking

The NRC staff provided an overview and status of the radioactive source security and accountability (RSSA) rulemaking. The NRC staff detailed the proposed RSSA revisions related to the safety and security equipment and facilities and license verification. In addition, the NRC staff is working on the website with FAQs to provide guidance on the safety and security equipment and facilities requirements, license verification requirements, and to provide accelerated updates to the licensees.

The NRC staff also outlined next steps for RSSA including further engagement with the stakeholders during the rulemaking process.

2023 Regulatory Information Conference

The 2023 Regulatory Information Conference (RIC) will be held in-person (with virtual components) on March 14 through March 16, 2023. The 2023 RIC presenters and panelists are expected to attend in person. The NRC plans to have 6 or 7 plenary sessions, 24 technical sessions, and 17 digital exhibits. The conference agenda and technical program are currently being finalized with the following schedule for each day:

Day 1: Tuesday, March 14, 8:00 am to 5:00 pm (Eastern Time (ET))

Day 2: Wednesday, March 15, 9:00 am to 5:00 pm (ET)

Day 3: Thursday, March 16, 8:30 am to 12:00 pm (ET)

The registration is planned to open in January 2023.

The NEI RITF representatives mentioned their topics of interest for the upcoming RIC:

- Exploring the NRC's role in National Carbon Reduction
- New Nuclear Opportunity (grid-scale electricity, small-scale, process heat, hydrogen, sustainable fuels, etc.)
- Existing Fleet Opportunities (license extensions, power uprates, hybrid energy systems)
- Oversight from the Inside Out: The Layers of Safety (Industry program managers, INPO, and the NRC/Regions)
- Risk-informed Processes for Issue Resolution (Technical Assistance Requests (TARs), Efficiencies of the Very Low Safety Significance Issue Resolution (VSSLR) Process, unresolved items (URIs)): Case studies/scenarios (e. g., Adverse weather and dry casks)
- Recruiting, Developing, and Retaining the Nuclear Workforce of the Future: A Challenge We All Face
- Examining Operational Performance, Risk, and Safety: How do they work together?
- Innovation in Rulemaking: Is it time to revamp this process?
- Plant Modernization and Innovative Technologies (e.g., Artificial Intelligence, Digital Twins)
- New Approaches to Digital Instrumentation and Controls: Keeping Up with the Times
- Accident Tolerant Fuel: Realizing High Burnup
- A Conversation on Backfit/Forward fit: Are We All on the Same Page? (Guidance, Training, and Implementation)
- Maintenance Rule 2.0: Reducing duplication
- International Regulatory Efficiency
- Advanced Reactor Licensing (the stakeholders would be interested in two sessions: one for CFR Part 53, and one for CFR Parts 50 and 52)
- Modernizing Security
- Advanced reactor development at Universities (Penn State, Purdue, ACU, UIUC, etc.)
- The Inspector General (IG) - Digital Poster or Table/Booth: Who is the IG? What is the IG's role?
- The Role of Probabilistic Risk Assessment (PRA) in Advanced Reactor Licensing: What is realistic, what is practical, what is optimal?
- Is it Time to Rethink New Nuclear Siting?

The NEI RITF representatives noted that it would be beneficial if stakeholders had an additional opportunity to provide their topics of interest to NRC, apart from the survey that is sent out upon the conclusion of the conference.

No comments or questions were received at the meeting from members of the public.

Please direct any inquiries to Ekaterina Lenning at Ekaterina.Lenning@nrc.gov.

Docket No. 99902028

Enclosure:

List of attendees

List of Attendees
U.S. Nuclear Regulatory Commission and Nuclear Energy Institute
Regulatory Issues Task Force Public Meeting
November 8, 2022
2:00 pm – 5:00 pm

Name	Organization
Mike King	U.S. Nuclear Regulatory Commission (NRC)
Bo Pham	NRC
Gregory Suber	NRC
Lois James	NRC
Undine Shoop	NRC
Hipo Gonzalez	NRC
Jackie Harvey	NRC
Tim Mossman	NRC
Nicole Fields	NRC
Andrew Lerch	NRC
Laura Smith	NRC
Michael Markley	NRC
Audrey Klett	NRC
Richard Bright	NRC
Andrew Carrera	NRC
Ernesto Quinones	NRC
Adelaide Giantelli	NRC
Melissa Ash	NRC
Mellissa Chui	NRC
Meena Khanna	NRC
Antonios Zoulis	NRC
Jennifer Dixon-Herrity	NRC
Luis Betancourt	NRC
Holly Cruz	NRC
Ekaterina Lenning	NRC
Daniel King	NRC
Jeffrey Smith	NRC
Ngola Otto	NRC
Ed Miller	NRC
Dennis Galvin	NRC
Siva Lingam	NRC
Terri McLaughlin	NRC
Amy Hardin	NRC
Anita Gray	NRC
John Hughey	NRC
George Smith	NRC
Christopher Tyree	NRC
Jordon Alston	NRC
Brett Titus	Nuclear Energy Institute (NEI)
James Slider	NEI
Andrew Mauer	NEI

Name	Organization
Tony Brown	NEI
Deann Raleigh	Curtiss-Wright
Jana Bergman	Curtiss-Wright
Sophie Gutner	Dominion Energy
Ryan Treadway	Duke Energy
Phil Lashley	Energy Harbor
Stephenie Pyle	Entergy
Phillip Couture	Entergy
Bob Clark	Entergy
Svetlana Lawrence	Idaho National Laboratory
Dave Gullott	Constellation Nuclear
Ryan Seabaugh	MDNR
Steve Catron	NextEra
Mike Wiwel	PSEG Nuclear LLC
Tammy Morin	PSEG Nuclear LLC
Harry Balian	PSEG Nuclear LLC
Hossein Hamzehee	Strategic Teaming and Resource Sharing Group
Cheryl Gayheart	Southern Nuclear Company
Wendy Brost	South Texas Project Nuclear Operating Company
Stuart Rymer	Tennessee Valley Authority
Sarah Scott	Xcel Energy
Marty Murphy	Xcel Energy
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John Conly	Unknown
Pearle Lipinski	Unknown

SUBJECT: SUMMARY OF NOVEMBER 8, 2022, MEETING WITH NUCLEAR ENERGY
 INSTITUTE REGULATORY ISSUES TASK FORCE (EPID L-2019-TOP-0044)
 DATED DECEMBER 2, 2022

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EXTERNAL DISTRIBUTION:

Brett Titus, NEI
bat@nei.org

ADAMS Accession Nos:

- ML22333A006 (Package)**
- ML22308A042 (Meeting Notice)**
- ML22307A272 (Presentation Slides)**
- ML22334A274 (Meeting Summary)**

OFFICE	NRR/DORL/LLPB/PM	NRR/DORL/LLPB/LA	NRR/DORL/LLPB/(A) BC	NRR/DORL/LLPB/PM
NAME	ELenning	DHarrison	LJames	ELenning
DATE	11/30/2022	12/1/2022	12/2/2022	12/2/2022

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