



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

October 24, 2023

MEMORANDUM TO: Maurin Scheetz, Chief
Operator Licensing and Human Factors Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

FROM: Jeff Correll, Reactor Engineer (Examiner Qualified)
Operator Licensing and Human Factors Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF SEPTEMBER 21, 2023, PUBLIC MEETING WITH
REPRESENTATIVES OF INDUSTRY

A handwritten signature in cursive script, appearing to read "Jeff Correll".

Signed by Correll, Jeffrey
on 10/24/23

On September 21, 2023, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with representatives of the Nuclear Energy Institute's Licensed Operator Focus Group; NextEra Energy, Inc.; and other representatives of the industry.

The purpose of the meeting was for the NRC staff and industry representatives to discuss the administration of the NRC's Operator Licensing Program. Specifically, the NRC staff and industry representatives discussed examination scheduling, an effectiveness review of Revision 12 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," ongoing rulemaking efforts, and plans for future revisions to NUREG-1021.

Enclosures:

1. List of Attendees
2. Agenda
3. Meeting Summary
4. NEI Presentation

CONTACT: Jeff Correll, NRR/DRO
(301) 415-2414

SUBJECT: SUMMARY OF SEPTEMBER 21, 2023, PUBLIC MEETING WITH
REPRESENTATIVES OF INDUSTRY DATE: October 24, 2023

DISTRIBUTION:

JCorrell, NRR
MScheetz, NRR
DJackson, RI
MEndress, RII
TStephen, RII
ANguyen, RIII
HGepford, RIV

ADAMS Accession No.: ML23285A142 NRR-106

OFFICE	NRR/DRO/IOLB	NRR/DRO/IOLB
NAME	JCorrell	MScheetz
DATE	10/24/2023	10/24/2023

OFFICIAL RECORD COPY

LIST OF ATTENDEES – SEPTEMBER 21, 2023, PUBLIC MEETING WITH
REPRESENTATIVES OF INDUSTRY

Name	Organization
Maurin Scheetz	NRC*
Jesse Seymour	NRC*
Brian Tindell	NRC*
Theresa Buchanan	NRC*
Rebecca Riggs	NRC*
Jeff Correll	NRC
Don Jackson	NRC
Tom Stephen	NRC
April Nguyen	NRC
John Kirkland	NRC
Abiola Oshunletì	NRC
Avinash Jaigobind	NRC
Brett Jebbia	NRC
Brian Bergeon	NRC
Clyde Osterholtz	NRC
Jason Carneal	NRC
Kelly Clayton	NRC
Maryia Bahndanovich-Kniazkova	NRC
Matt Emrich	NRC
Natalia Salazar	NRC
Nick Hernandez	NRC
Paul Briedenbach	NRC
Randy Baker	NRC
Tania Martinez Navedo	NRC
Ted Wingfield	NRC
Thomas Farina	NRC
Travis Iskierka-Boggs	NRC

LIST OF ATTENDEES – SEPTEMBER 21, 2023, PUBLIC MEETING WITH
REPRESENTATIVES OF INDUSTRY

Name	Organization
Troy Henning	NRC
Jimmy Wong	NRC
Tim Riti	Nuclear Energy Institute*
Kostas Dovas	Constellation Energy*
Tom Dean	Constellation Energy*
Fred Bruns	Constellation Energy*
Eric Salzwedel	NextEra Energy*
George Asbeck	Unknown
Jana Bergman	Curtiss-Wright
Wyatt Godes	Unknown
John Conly	Unknown
Russell Joplin	Tennessee Valley Authority
Rayford Eugene Loggins, III	Unknown
Mary H Miller	Unknown
Michael Anderson	Unknown
Mike Montecalvo	Unknown
Norman Lynn Mynatt	Unknown
Michael M Peterson	Unknown
Joshua Reuer	Unknown
Chris Rop	Unknown
Sean Wylie	NextEra Energy

Note: An asterisk (*) indicates attendance was in person. All other attendees participated via video teleconference.

AGENDA FOR THE U.S. NUCLEAR REGULATORY COMMISSION
PUBLIC MEETING WITH INDUSTRY OPERATOR LICENSING REPRESENTATIVES
Thursday, September 21, 2023
09:30 a.m. to 11:30 a.m. Eastern Standard Time

Hybrid meeting

<u>TOPIC</u>	<u>PRESENTER</u>
Opening Remarks	NRC/Industry
Examination Scheduling	NRC
Written Examination Outline Generator	NRC
Operator Licensing Public Dashboard	NRC
Operator Licensing Program Feedback	NRC
Advanced Reactors	NRC
Ongoing Regulatory Activities	NRC
NUREG-1021 Rev.12 Effectiveness Review	NRC
Industry Topics	Industry
Public Comments	Public
Closing Remarks	NRC/Industry

MEETING SUMMARY

Introduction

This public meeting between Nuclear Regulatory Commission (NRC) staff and representatives of the industry was to discuss the operator licensing (OL) program administered by the NRC staff. Specifically, the NRC staff discussed current topics of interest, including examination scheduling, Revision 12 of NUREG-1021, ongoing rulemaking, and plans for future revisions to NUREG-1021.

No regulatory decisions were made during the meeting.

The NRC staff opened the meeting with a discussion about the ongoing examination scheduling process, including an apparent increase in the number of future examinations requested and emphasized that the NRC staff has a small margin for accommodating emergent changes to the schedule. Due to NRC-wide hiring efforts, the NRC staff explained that there might be additional NRC observers during examinations and requalification inspections to allow for training and qualification of new NRC examiners. The NRC staff also stated that the annual operator licensing examination RIS responses are important to the budgeting and scheduling process used by the staff for allocating resources for operator licensing examinations. The industry representatives encouraged responses to the RIS and acknowledged that qualifying new NRC examiners also includes NRC-authored licensing examinations; they encouraged rotating these exams between the facility licensee sites. The industry representatives also stated that they understand the position the NRC staff is in with hiring and qualifying new personnel, and that they are having high turnover for facility licensee examination writers; they are looking for ways to ensure that new exam writers understand the requirements of NUREG-1021.

The NRC staff gave a presentation about the development of a new sample plan generator, with an overview of the features available to automatically generate a sample plan consistent with NUREG-1021 requirements. A question was asked about whether the use of the sample plan generator would enable facilities to generate their own written sample plans for initial operator licensing examinations. The NRC staff stated that the NRC will continue to generate the sample plans for NRC initial licensing examinations and provide these to the facility licensee for consistency of process purposes. Code for the sample plan generator will be made available for industry use, such as for generating outlines for audit examinations.

The NRC staff presented about upcoming changes to the operator licensing public website dashboard, including the future replacement of the static document detailing exam statistics with an interactive, automatically updated dashboard. One question was asked regarding what level of dashboard interaction is going to be allowed by the public. The NRC staff stated that the level of detail is yet to be determined because the dashboard is still being developed.

The NRC staff presented the status of operator licensing public feedback program. Some industry representatives stated that responses provided by the NRC to questions they asked via the program were very thorough and prompt and that they appreciated the effort by the NRC staff to respond to each question.

The NRC staff presented ongoing rulemaking actions related to operator licensing, including the status of the proposed Part 53 rulemaking. An industry representative asked if the staff has considered potential use of digital simulators for training and potential evaluation. The staff responded that they are evaluating simulator standards, including glass top simulators, as part

Public Meeting with Industry Operator Licensing Representatives

of the review of American National Standard “Nuclear Power Plant Simulators for Use in Operator Training and Examination,” ANSI/ANS-3.5-2018.

The NRC staff presented the status of the NUREG-1021, Rev.12 effectiveness review. An industry representative stated that some industry facilities also had performed an effectiveness review and had similar observations to what the NRC presented. The industry representatives also stated that all utilities were still teaching generic fundamentals content and examining applicants’ knowledge of generic fundamentals. The industry representative stated that the major change for generic fundamentals training is that facilities are now testing on fundamentals topics throughout the training period leading up to the initial operator licensing examination. The industry representative stated that this allows a better integration of the fundamentals knowledge with other plant-specific knowledge, and the applicants should retain the information longer due to the longer training period. Additionally, the industry shared that they did not observe any issues regarding the documentation of decisions related to applicant onsite time or degree requirements for applicants in the initial license classes.

An industry representative discussed the topic of Senior Reactor Operator (SRO) and Limited Senior Reactor Operator (LSRO) licenses. The industry is interested in the use of experienced SROs as LSROs at other similar facilities during refueling outages. This would involve dual licensing of SROs as LSROs at more facility sites. The industry representatives referenced NUREG-1021 Sections 7.1 and 7.2, regarding the administration of initial examinations and NRC requalification examinations for LSROs and the guidance in NUREG-1021 to request an additional LSRO license. For this type of licensing, the Nuclear Energy Institute is interested in developing industry guidance for sample exemption and waiver requests, management of licenses and program requirements, requalification examination requirements, and just in time training. The NRC staff expressed the need to be consider how to meet proficiency requirements and how to administer requalification examinations; the requalification examination process must remain equitable and consistent for all license holders at a facility. The industry acknowledged these concerns and added that there is a potential safety benefit to having SROs who are exposed more frequently to fuel handling. The NRC staff acknowledged the industry’s presentation and stated that the staff would look for a future submittal from NEI on this topic. There was one question from the NRC staff regarding NRC Form 398 and how an LSRO applicant would meet the requirement on this form for an accredited training program. The NRC staff stated that, in lieu of an accredited training program, the NRC Form 398 allows the facility to provide all the content of the training program for NRC review and that this could be one way to fill out that portion of the application.

Finally, the industry mentioned that there is an NEI examiner workshop scheduled in February 2024 and would encourage anyone interested in attending to register.

Public Comments

There were no public comments.

NEI PRESENTATION

SRO/LSRO Opportunity

Operator Licensing
Public Meeting

September 21, 2023



Purpose



- Opportunity to use experienced SROs in an additional role during refueling outage support at plants of similar design
- Discuss an approach to license current Senior Reactor Operators (SROs) as SROs limited to fuel handling (LSRO) at plants with similar designs (e.g., sister stations)



Overview

- NUREG-1021 Sect. 7.1 & 7.2 describe administration of initial exams and NRC requal exams for senior operators limited to fuel handling (LSRO)
- Provisions allow for LSRO licenses at multiple sites
 - “As an exception to ES-2.2, the facility licensee may request LSRO licenses that are valid for more than one site. To do so, the facility licensee shall document the differences in the design, procedures, technical data, and administrative controls of the separate facilities for which the license is being sought.” (ES-7.1.B.1.a)
 - “With the concurrence of the Office of Nuclear Reactor Regulation (NRR) operator licensing program office, the NRC regional office may issue LSRO licenses that are valid for units at more than one site if the units are manufactured by the same vendor and are of similar design. The applicant must pass an examination that addresses the differences in the design, procedures, technical data, and administrative controls of the separate facilities for which the license is being sought.” (ES-7.1.B.2.b)
- Goal would be to have an approach similar to LSROs licensed at multiple sites for fully licensed SROs.

Process



- Modify or issue separate license(s) to allow SROs to perform LSRO functions at additional sites manufactured by the same vendor and are of similar design
- Would require completing site-specific fuel handling training and documentation by the facility licensee on the differences in the design, procedures, technical data, and administrative controls of the separate facilities for which the LSRO license is being sought
- 10 CFR 55.11 specific exemptions & 55.47 waivers of examination and test requirements may have applicability
 - (1) Has had extensive actual operating experience at a comparable facility, as determined by the Commission, within two years before the date of application;
 - (2) Has discharged his or her responsibilities competently and safely and is capable of continuing to do so; and;
 - (3) Has learned the operating procedures for and is qualified to operate competently and safely the facility designated in the application.

Summary/Next Steps



- NEI LOFG looking at developing industry guidance
 - Templated exemptions and/or waivers
 - Managing licenses & program requirements
 - Requalification exam requirements and Just-in-Time training

- Further discussion with NRC on how the NUREG-1021 provisions for LSROs could apply to SRO/LSROs