




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

July 1, 2024

MEMORANDUM TO: Russ Felts, Director
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

FROM: James Anderson, Chief  Signed by Anderson, James
Operator Licensing and Human Factors Branch on 07/01/24
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE 2024 ANNUAL UNITED STATES NUCLEAR
REGULATORY COMMISSION/INSTITUTE OF NUCLEAR POWER
OPERATIONS COORDINATION MEETING ON TRAINING-
RELATED ISSUES

On June 5, 2024, the U.S. Nuclear Regulatory Commission (NRC) conducted a public observation meeting on training-related topics with the Institute of Nuclear Power Operations (INPO) via Microsoft Teams and a teleconference call. This Coordination Meeting was conducted in accordance with the NRC/INPO Memorandum of Agreement dated December 1, 2022 (Agencywide Documents Access and Management System (ADAMS) No. ML23026A093). The purpose of the meeting was to discuss items of mutual interest concerning INPO's training program accreditation process and other initiatives. Participants included representatives of the NRC's Office of Nuclear Reactor Regulation (NRR); Office of Public Affairs, and Office of the Inspector General; INPO's Workforce Training, Education and Proficiency Division; and members of the public.

Introductions and Opening Remarks

The NRC and INPO provided opening remarks. INPO's opening remarks included discussion of organizational changes since the 2023 Coordination Meeting. During opening remarks, the NRC and INPO both discussed the importance of training and qualifications, and the need to have effective communications between the two organizations.

Enclosures:

1. Meeting Attendee List
2. Meeting Agenda

CONTACT: Bernard Litkett, NRR/DRO
301-415-3657

NRC Regulatory Issues

Update on 10 CFR Part 53 Rulemaking

The proposed 10 CFR Part 53, “Risk informed, Technology-inclusive Regulatory Framework for Advanced Reactors,” rulemaking provides an optional regulatory framework for new advanced reactors, including redesigned frameworks for staffing, personnel qualifications, training programs, operator licensing examinations, and human factors engineering. The proposed framework includes Senior Reactor Operators (SRO) and Reactor Operators (RO), while also creating a new Generally Licensed Reactor Operator (GLRO). Customized initial and requalification examinations programs with NRC approval, facilities would propose the test methods and criteria used such as develop plant specific knowledge and abilities lists and facilities could administer exams (with NRC inspection).

Update on the effectiveness review of NUREG-1021, Revision 12, “Operator Licensing Examination Standards for Power Reactors,”

The objective of the NUREG-1021, Revision 12, “Operator Licensing Examination Standards for Power Reactors,” effectiveness review is to monitor the use of new instructions and guidance in NUREG-1021 to determine if additional actions are needed, such as additional training or clarifications to support implementation of Revision 12.

Revision 12 became effective in March 2022 and introduced several changes to the NRC examination standards, including the elimination of the NRC Generic Fundamentals Examination and incorporation of generic fundamentals topics into the site-specific written examination. This revision of the NUREG also recognizes the eligibility requirements in ACAD-10-001, “Guidelines for Initial Training and Qualification of Licensed Operators,” for operator training programs accredited by the National Nuclear Accrediting Board.

In September 2023, the NRC published an interim report with observations from the first year of Revision 12 examinations, which included approximately 40 examinations for 400 applicants. The interim report, dated September 30, 2023, is publicly available in ADAMS (ML23304A006).

Report on Effectiveness of Training in the Nuclear Power Industry

For calendar year 2023, the NRC staff reviewed data from the NRC Reactor Oversight Process (ROP), reported events at operating power reactors, and NRC observations of training and accreditation activities conducted by INPO.

This included review of findings identified during implementation of the ROP, licensing event reports prepared by the industry, and NRC staff observations of INPO and the National Nuclear Accreditation Board (NNAB) activities. The results of the review are in the annual report and available in ADAMS (ML24142A242). In 2023, the NRC conducted 572 inspections of the licensed operator requalification program in accordance with inspection procedure 71111.11, the baseline inspection procedure. Of the 466 total findings in 2023, only 6, or 1.2%, were related to Training and Qualification Deficiencies.

The NRC’s assessment of the accreditation process indicates that renewed accreditation of facility training programs remains a reliable indicator of successful implementation of a SAT and

contributes to the reasonable assurance of public health and safety by ensuring that nuclear power plant workers are being adequately trained and qualified.

Oversight of Palisades Nuclear Plant Restart Activities Related to Training

The NRC has begun restart-related inspections at Palisades, and recently completed an inspection of the licensee's re-establishment of the control room simulator to ensure it was restored back to its certified condition. This inspection is documented in inspection report 2024010 (ML24078A315).

The NRC observed the INPO operations training accreditation team on-site review and attended the in-person review board conducted for the Palisades evaluation. The NRC also observed the on-site review by INPO for the maintenance and technical accreditation team; the in-person review board will occur later this year. The NRC is inspecting and observing operations requalification training and testing activities for re-licensing previous license holders (senior reactor operators and reactor operators).

INPO

INPO has continued all accreditation activities, seminars, and courses as planned. The virtual activities have allowed more frequent engagement with facility staff, improved continuous monitoring of training, and have reached more leadership staff at the sites.

Accreditation Update

Since June 2023, INPO has completed 21 remote accrediting boards and one in-person board for operations training programs.

In July 2023, INPO transitioned the INPO accreditation process into a continuous accreditation monitoring process. This change will replace accreditation team visits with a multitude of site visits during which all aspects of INPO's current process will still be implemented over the 6-year accreditation cycle.

This continuum process is an ongoing inspection over six years and the summary of the details is provided to an independent board for reaccreditation. A pilot is ongoing to have both operations and maintenance and technical training boards at the same time. NRC is invited to attend.

INPO continues to get meaningful feedback from NRC observers, including observations of two on-site activities in 2023 at Palisades. Additionally, an NRC observer will observe the Columbia operations performance continuum in July 2024.

In the new process, prior to the accrediting board, INPO and station personnel will complete accreditation readiness activities either virtually or in-person to ensure that appropriate information has been gathered, and to align industry stakeholders on key points documented in the accreditation reports.

Initial Accreditation

Palisades completed accreditation of initial operations training programs in February 2024 and is pursuing maintenance and technical accreditation later this year.

New Reactors

INPO is engaging with new reactor vendors and is establishing a vision with them on future training and accreditation processes. This is an ongoing discussion and no accreditation activities have been conducted with them yet.

National Academy for Nuclear Training (National Academy) document revisions

Two National Academy documents have been revised to align with the new accreditation performance continuum: ACAD-02-001, "The Objectives and Criteria for Accreditation of Training in the Nuclear Power Industry," and ACAD-02-002, "The Process for Maintaining Accreditation in the Nuclear Power Industry."

Industry Learning Activities

In 2023, the Industry Learning Division at INPO developed, delivered, and supported common learning for the industry on behalf of the National Academy. The Industry Learning Division provided instructor-led training at both INPO and remote locations for leadership development and technical topics. INPO also delivered training through the National Academy eLearning system, commonly referred to as NANTeL.

Leadership courses

INPO's leadership courses and seminars focus on individual leadership development. In 2023, INPO developed and started delivering standard in person seminars and training instructor courses using virtual platforms, which provided additional options for industry participation.

INPO discussed development of training using NANTeL, a national web-based training system. NANTeL started in 2006 and has seen significant increases in usage over the last year, with over 70,000 utility workers participating. In 2023, NANTeL had approximately 750,000 certifications completed. This allows workers at multiple locations to complete interactive, online training for site access, fitness for duty, and radiation protection. INPO stated that this type of training can support the needs of industry into the future.

Other Items of Mutual Interest Related to Training NRC/INPO

INPO discussed meetings, lessons learned, and workshops related to nuclear training that have been conducted with training managers, now held in a virtual format.

INPO discussed its strategic focus area on teaching and learning strategy. INPO is in its fourth year of a ten-year strategy to improve industry performance in several areas. One of these areas is to advance the industry's behaviors and methods deployed to teach and learn. Nuclear industry training imparts the basic knowledge needed for a qualified, effective workforce. Similarly, industry training in simulators, labs and on -the job reinforces the skills needed to achieve quality work. This approach has contributed to an industry performing at record high levels today.

To improve the likelihood to sustain this high level of performance and advance it further, this strategy will focus on nuclear leaders and workers being passionate learners and teachers. To

this end, the National Academy is committed to fostering an industry culture of continuous learning through an emphasis on advanced teaching methods, cutting-edge technologies and applying the insights into the science of adult learning. INPO's primary focus this year is implementation of the INPO Teaching and Learning guidance document released to the industry in January this year. This document clarifies best practices to achieve standards of excellence for continuous learning. INPO is in the second year of a 10-year program to improve training and performance. The NANT's focus is on improving teaching. Focus areas include nuclear leaders being passionate learners, continuous learning through advanced teaching methods, and applying insights on adult learning. INPO plans to issue a new NANT document in this area.

Closing Remarks

In closing, the NRC and INPO agreed that this meeting was productive and future meetings would continue. The NRC staff stated it is looking forward to continued engagement on accreditation activities and continued dialogue on the major activities the NRC and INPO are working on for advanced reactors. No final positions were taken during the meeting.

SUBJECT: SUMMARY OF THE 2024 ANNUAL UNITED STATES NUCLEAR REGULATORY COMMISSION/INSTITUTE OF NUCLEAR POWER OPERATIONS COORDINATION MEETING ON TRAINING-RELATED ISSUES
DATE: July 1, 2024

DISTRIBUTION:

Public
RFelts, NRR
JAnderson, NRR
BLitkett, NRR
DJackson, RI
TStephen, RII
PZurawski, RIII
HGepford, RIV
MEmrich, TTC

Accession Number: ML24165A074

NRR-106

OFFICE	NRR/DRO/IOLB	NRR/DRO/IOLB	NRR/DRO/IOLB
NAME	BLitkett	JCorrell	JAnderson
DATE	6/13/2023	6/13/2023	7/1/2023

OFFICIAL RECORD COP

NRC–INPO Coordination Meeting Webinar and Teleconference, June 5, 2024, ATTENDEES

Nuclear Regulatory Commission

Russel Felts, Director, Division of Reactor Oversight (DRO), NRR
Phillip McKenna, Deputy Director, NRR/DRO
Danté Johnson, Acting Deputy Director, NRR/DRO
Jim Anderson, Chief, Operator Licensing and Human Factors Branch (IOLB), NRR/DRO
Lauren Nist, NRR/DRO/IOLB
Bernard Litkett, NRR/DRO/IOLB
Jeff Correll, NRR/DRO/IOLB
Maurin Scheetz, NRR/DRO/IOLB
Therse Buchanan, NRR/DRO/IOLB
Joey McPherson, NRR/DRO/IOLB
Jimmy Wong, Office of the Inspector General
Scott Burnell, Office of Public Affairs
Lawrence Heller, Office of the Inspector General
Zoe Cross, Office of the Inspector General

INPO Participants

Amanda Donges, Executive Director, National Academy for Nuclear Training; and Senior Vice President, Teaching and Learning
Larry Lucas, Director, Industry Training and Accreditation
Vanessa Locke, Director, Industry Learning
Brain Gollatz, Manager, Teaching and Learning
Joyce Tomlinson, Senior Evaluator, Training
Greg Canada, INPO

Members of the Public

Andrew Zach, Senate Environment and Public Works Committee
Fred W Madden, Senior Project Manager, Certrec
Jana Bergman, Curtiss Wright
Timothy Riti, Nuclear Energy Institute
Tim Polich, Ro Power
Robert Meyer
Chris Salz

ANNUAL PUBLIC MEETING AGENDA

June 5, 2024, 2:00 pm to 4:00 pm

Teams meeting and teleconference call.

Time

Topic Speaker

2:00 pm Introductions and opening remarks NRC/INPO

2:15 pm Accreditation Update INPO

- Accreditation Update
- Summary of accreditation activities
- Initial accreditation
- New Reactors
- Academy document revisions

2:30 pm Regulatory Issues NRC

- An overview of 10CFR Part 53 rule making update
- An overview of NUREG-1021 Revision 12, effectiveness review
- Report on Effectiveness of Training in the Nuclear Power Industry
- Oversight of Palisades Restart Activities related to training

2:45 pm Industry Learning INPO

- Leadership courses
- E-learning (NANTeL)

3:00 pm Other Items of Mutual Interest Related to Training NRC/INPO

- Discussion on the Annual INPO report–**NRC**
- Meetings and workshops conducted - **INPO**
- Training and performance continuum- **INPO**
- Teaching/learning Strategy- **INPO**

3:30 pm Public Input NRC

3:50 pm Closing Remarks NRC/INPO

4:00 pm Adjourn