

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

June 20, 2019

| MEMORANDUM TO: | Christopher G. Miller, Director<br>Division of Inspection and Regional Support<br>Office of Nuclear Reactor Regulation  |
|----------------|---|
| FROM:          | Christian B. Cowdrey, Chief / <b>RA</b> /<br>Operator Licensing Branch<br>Division of Inspection and Regional Support<br>Office of Nuclear Reactor Regulation         |
| SUBJECT:       | SUMMARY OF THE 2019 ANNUAL UNITED STATES NUCLEAR<br>REGULATORY COMMISSION/INSTITUTE OF NUCLEAR POWER<br>OPERATIONS COORDINATION MEETING ON TRAINING-RELATED<br>ISSUES |

On May 23, 2019, the U. S. Nuclear Regulatory Commission (NRC) conducted a public coordination meeting on training-related issues with the Institute of Nuclear Power Operations (INPO) at INPO Headquarters in Atlanta. Such meetings are conducted in accordance with the NRC/INPO Memorandum of Agreement dated September 11, 2013. 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), Region II and III Operations Branches, INPO's Workforce Training, Education and Proficiency Division, and members of the public.

### **Introductions and Opening Remarks**

An introduction of the members of the public, NRC, and INPO personnel was conducted. NRC and INPO provided opening remarks, including a discussion of organizational changes since the 2018 Coordination Meeting. INPO discussed its strategy to improve worker proficiency in applying knowledge and skills to reduce errors and events. The NRC discussed efforts to improve the efficiency of licensed operator examinations. During opening remarks, NRC and INPO both discussed the importance of training and qualifications, and the need to effective communications between the two organizations.

Enclosures:

- 1. Meeting Attendee List
- 2. Meeting Agenda

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

# Accreditation Update

INPO reported that from May 2018 to April 2019, INPO conducted 18 Accreditation Team Visits (ATVs) and 16 National Nuclear Accreditation Boards (NNABs) for the Operations and Maintenance and Technical Training Programs. INPO has an additional 13 ATVs and 13 NNABs scheduled in 2019 for the Operations and Maintenance and Technical Training Programs. Last year, NRC observers participated in most of the NNABs and an NRC observer participated in the ATV at Brunswick Steam Electric Plant.

INPO has been working with a small modular reactor contractor to consider how to accredit their training programs. The key decision point is whether the license holder or the contractor would be a member of the National Academy for Nuclear Training (NANT). At this point INPO is holding quarterly phone conferences to consider what academy documents might have to change because of the technological differences. Until there is an actual "owner" identified, INPO does not have the ability to make a final decision on NANT membership.

### **Regulatory Issues**

The NRC discussed options on proposed revisions to the Generic Fundamentals Examination (GFE). A GFE working group was convened and provided three recommendations to management regarding possible changes to the GFE to improve schedule flexibility while minimizing resource costs. The staff is proposing reintegrating the testing of fundamentals into the site specific written examination. The staff and the Nuclear Energy Institute (NEI) have plans to pilot the reintegration approach during audit examinations on two Boiling Water Reactors and two Pressurized Water Reactors in 2019.

The NRC discussed the proposed revision of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." The revision would consolidate and streamline examiner standards for ease of use and would establish the necessary flexibility to be able to revise individual examiner standards rather than the entire NUREG. The revision also would improve guidance for defining performance deficiencies and critical tasks and create a place holder for advanced reactor examinations. The staff plans to keep the industry informed during the development of revised guidance. The NRC will also be considering longer-term options for revised operating test grading approaches that are focused on the required actions and task standards for each scenario event. Finally, the operator licensing program for the NuScale design is in the initial stages of development.

The NRC staff stated that 57 Vogtle Units 3 and 4 applicants have pass letters. The next NRC initial license examination is scheduled in the summer of 2020. The NRC staff is currently evaluating when to issue Vogtle licenses.

The NRC discussed the revision of NUREG-1122, "Knowledge and Abilities Catalog Nuclear Power Plant Operators: Pressurized Water Reactors," and NUREG-1123, "Knowledge and Abilities Catalog Nuclear Power Plant Operators: Boiling Water Reactors." NEI has provided the raw data for all the importance ratings for verification purposes. The NRC discussed that the agency plans to evaluate the re-submittal by NEI, resolve internal comments, and publish the catalogs. The NRC plans to begin the effort this summer and complete publication this year. There will be a transition period to the new revision for written examinations, which the staff will discuss before publication.

# **Industry Learning Activities**

INPO provided an update on industry learning activities. The National Academy for Nuclear Training e-Learning (NANTel) is a national web-based training system. Since NANTeL was launched, it has continued to grow by increasing the number of course offerings and users. It now serves common industry learning for over 70,000 utility and supplemental workers. Last year, students completed approximately 784,000 certifications using industry, INPO, and Electric Power Research Institute (EPRI) developed courses. These common courses, taken on NANTeL, allow workers to work at multiple locations without having to take site-specific courses on the same material. These courses cover topics such as initial plant access, radiation worker training, and fitness for duty. INPO is currently performing an assessment on the NANTeL system to identify actions needed to keep the system reliable, and able to support utility workers into the future.

## Scope of INPO Stand-Up Programs

Most of INPO's stand-up, classroom seminars focus on individual and team leadership attributes and development. INPO courses and seminars support development of leaders at almost every level of a nuclear organization from the first level supervisor to members of the Board of Directors. The NRC staff contributes time and support to several of these courses that adds to the quality of the learning experience for the students. Commissioners routinely address the executive level students at our reactor technology course at Massachusetts Institute of Technology. Recently, INPO had a first-time NRC participant in one of INPO senior leader level seminars. The participation was beneficial to the entire class. INPO greatly appreciates NRC participation in and support of these programs.

### INPO discussion on "DaVinci"

In mid-2018, INPO began an effort, that is now called "DaVinci," to consider innovation in INPO's accrediting process. INPO established a joint INPO and industry team with periodic observations by the NRC staff. INPO has developed two concepts for decision by the Executive Director of the NANT. Both concepts have been developed with the need for observations by the NRC staff.

Both concepts have an independent board (including a member nominated by the NRC) with power to renew, place all or some of the programs on probation, or withdraw accreditation from one or all programs.

In both concepts, the board first meets in video conference to decide on renewal or to require the station staff to appear before the board. Probation or accreditation withdrawal decisions will only be made if the station has appeared before the board.

In both concepts, the station will provide their self-assessments and a streamlined data sheet that describes their adherence to the systematic approach to training. These inputs replace the current Accreditation Self-Evaluation Report (ASER) and will be the primary tools to assess the accreditation of objectives 1 (Foundation of training) and 3 (evaluation of training program effectiveness). On-site observations will continue to be the primary means of assessing Objective 2 (Implementation of training).

In Concept 1, the on-Site observations of training occur during activities scheduled in conjunction with the World Association of Nuclear Operators (WANO) Peer Review cycle (four years) and INPO continuous monitoring concurrently for all 12 programs.

In Concept 2, on-Site observations are conducted in the two-year periods leading up to the board decision on a six-year cycle with the programs divided as they are today. The innovation team is still considering the periodicity for accreditation.

NRC staff oversight for both concepts would include observation of NANT during on-Site visits for training activity observations, the video conference boards for renewal decisions, and the boards with station staff present (as is done today). During this phase INPO will develop a detailed change management plan to implement the new process in early to mid-2020.

# Other Items of Mutual Interest Related to Training

INPO provided an update on several revised ACADs and will be providing copies to the NRC.

## **Eligibility Requirements**

The NRC will determine how NUREG 1021 can effectively refer to the eligibility requirements that are outlined in ACAD 10-001, "Guidelines for Initial Training and Qualification of Licensed Operators." NRC is not permitted to approve waivers of industry eligibility requirements.

## Public input including questions and answers

A representative from the Professional Reactor Operator Society asked two questions:

- 1. For Revision 3 to NUREG-1122 and NUREG-1123, will the NUREGs be submitted for public comments? The NRC staff responded that the revisions have already been subject to a public comment period, but the NRC will evaluate if an additional public comment period is needed.
- 2. For the leader's program does the International Atomic Energy Agency (IAEA) share operating experience? INPO responded to state that INPO coordinates its industry training activities with the IAEA and its industrial proficiency programs and school on leadership. INPO is a member of WANO and the IAEA is included in the WANO network. Additionally, INPO provides remote leadership development seminars at the sites of many international WANO Atlanta Center members.

### **Closing Remarks**

In closing, the NRC and INPO agreed that this meeting was productive and future meetings would continue. No final positions were taken during the meeting.

## C. Miller

### SUBJECT: SUMMARY OF THE 2019 ANNUAL UNITED STATES NUCLEAR REGULATORY COMMISSION/INSTITUTE OF NUCLEAR POWER OPERATIONS COORDINATION MEETING ON TRAINING-RELATED ISSUES DATED JUNE 20, 2019

### **DISTRIBUTION**:

PUBLIC COLP Reading File IOLB Reading File RidsNroDcip RidsEDOMailCenter RidsNrrOdResource RidsNrrDirs RidsNrrDirsIolb REgli, TTC MEvans

CMiller CCowdrey MEmrich, TTC DJackson GMcCoy EGuthrie RBaker GWerner SRutledge, TTC

### ADAMS Accession No: ML19161A193

| Official Becord Copy |               |               |  |
|----------------------|---------------|---------------|--|
| DATE                 | 6/11/19       | 6/20/19       |  |
| NAME                 | BLitkett      | CCowdrey      |  |
| OFFICE               | NRR/DIRS/IOLB | NRR/DIRS/IOLB |  |

**Official Record Copy** 

### ATTENDEES

#### INPO-NRC Coordination Meeting, May 23, 2019

#### **Institute of Nuclear Power Operations**

Lisa Brattin, Senior Vice President, Workforce Training, Education and Proficiency George Manaskie, Director, Industry Training and Proficiency Joe White, Manager, Training Debbie Williams, Director, Industry Learning Terry Maund, Manager, Learning Delivery Jim Caulk, Sr. Evaluator, Training Matt Dukette, Accreditation Team Leader, INPO observer Greg Kanda, Accreditation Team Leader, INPO observer Christian Williams, Senior Innovation Program Manager, INPO observer

#### **Nuclear Regulatory Commission**

Christopher Miller, Division Director, DIRS/NRR Christian Cowdrey, Chief, Operator Licensing Branch, DIRS/NRR Bernard Litkett, Operator Licensing Branch, DIRS/NRR

#### Others connected via Telephone Bridge

David Decker, Associate Director, OCA Gerald McCoy, Operator Licensing Branch, RII Eugene Guthrie, Operator Licensing Branch, RII Travis Iskierka-Boggs, DIRS/NRR Stephen J. Vaughn, NEI Pat Leary, NuScale Mark Chitty, NuScale Robert Meyer, **Professional Reactor Operator Society** Steven Dolley Managing Editor, Inside NRC

# PUBLIC MEETING AGENDA

Notice of Meeting with the Institute of Nuclear Power Operations (INPO)

### May 23, 2019, 9:00 am to 11:30 am

### Institute of Nuclear Power Operations, Room 211 700 Galleria Parkway, SE Atlanta, Georgia

### TOPICS

- 9:00 Introductions and Opening Remarks
- 9:10 Accreditation update
- 9:30 Regulatory Issues
- 9:50 Industry Learning Activities
- 10:10 INPO discussion on "DaVinci"
- 10:40 Other items of Mutual Interest Related to Training
- 11:00 Public input including questions and answers
- 11:20 Closing Remarks
- 11:30 Adjourn