



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

June 18, 2018

MEMORANDUM TO: Mark S. Miller, Acting Director
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

FROM: Nancy Salgado, Chief */RA Christian Cowdrey Acting for/*
Operator Licensing Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE 2018 ANNUAL UNITED STATES NUCLEAR
REGULATORY COMMISSION/INSTITUTE OF NUCLEAR POWER
OPERATIONS COORDINATION MEETING ON TRAINING-RELATED
ISSUES

On May 21, 2018, 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 NRC Headquarters, Rockville, Maryland. 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); Office of New Reactors (NRO); a Regional Operations Branch; INPO's Workforce Training, Education and Proficiency Division, and members of the public. The list of meeting attendees is provided as Enclosure 1. The meeting agenda is provided as Enclosure 2. A post implementation of NUREG-1021 Revision 11 on reactor operator and senior reactor pass rate graph for the initial licensed operating examination is provided as Enclosure 3. A summary of the discussions related to key agenda topics covered during the meeting follows.

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 2017 Coordination Meeting. During opening remarks, NRC and INPO both discussed the importance of training and qualifications, and the need to maintain alignment between the two organizations. INPO stated that its focus areas include industry work, self-awareness and self-correcting, proficiency of personnel, instructor performance and line ownership of training.

Enclosures:

1. Meeting Attendee List
2. Meeting Agenda
3. Post NUREG 1021, Revision 11 Licensed Operator Pass Rate graph

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M .Miller

Accreditation Update

INPO reported that since the last meeting from May 2017 to April 2018, INPO conducted 28 Accreditation Team Visits (ATVs) and 29 National Nuclear Accreditation Boards (NNABs) for Operations and Maintenance and Technical Training Programs. INPO has an additional 11 Accreditation Team Visits and 12 Accrediting Boards scheduled in 2018 for the Operations and Maintenance and Technical Training Programs. Last year, NRC observers participated in all NNABs and an NRC observer participated in the ATV at Calvert Cliffs. The NRC discussed the right balance regarding NRC observations of selected NNABs. INPO stated the NRC observing every other NNAB is agreeable.

INPO stated that all future ATVs and NNABs would use the re-designed accreditation process and all plants will have completed the transition to the new process by 2021. The new process focuses on three accreditation objectives and will lengthen the accreditation cycle from every four years to six years. INPO discussed initial program accreditation for new construction plants at Vogtle Units 3 and 4. INPO also provided an update on other activities supported by the accreditation group, including the addition of a quarterly assessment on training performance with evaluations every two years. A new site performance-based evaluation was discussed. If the evaluation identifies a decline in performance, then continuous monitoring of training will be initiated along with monthly discussions with appropriate site personnel. INPO discussed the need for de-commissioning plants to conduct final shutdown within the six-year accreditation period.

Regulatory Issues

The NRC discussed ACAD 10-001 November 2016, "Guidelines for Initial Training and Qualification of Licensed Operators," which is listed as Proprietary Information by INPO. NUREG-1021, Revision 11, "Operator Licensing Examination Standards for Power Reactors," contains reference to the National Academy for Nuclear Training (NANT). Since the public does not have access to ACAD 10-001, it is difficult for the public to develop an understanding of the requirements for licensed operator training. The NRC stated that they received questions from the public regarding what classes and individual should take to support obtaining an operating license, along with other eligibility questions. The NRC requested INPO to review ACAD 10-001 to determine if specific sections of ACAD 10-001 can be made available. INPO stated that they will review this request.

The NRC discussed NUREG 1021, Revision 11, which was issued via Federal Register Notice (FRN) on February 15, 2017, with an implementation date of August 15, 2017. Twenty-two initial licensed operator examinations have been administered using this revision. The results of these examinations show an upward trend in the overall pass-rate for reactor operators and senior reactor operators.

The NRC discussed the Knowledge and Abilities (K&A) Catalogs for Nuclear Power Plant Operators: Pressurized Water Reactors and Boiling Water Reactors (NUREGs 1122 and 1123), which were issued for public comment on Friday, April 14, 2017. The public comment period ended on Monday, May 15, 2017. The Nuclear Energy Institute (NEI) raised a concern with the Generic Fundamentals Examination (GFE) K&As in sections five and six of the catalogs. The staff accepted the late comment for consideration. The NRC staff has requested NEI to provide the raw data for all of the importance factors for verification purposes. Once the raw data is provided the staff will review the data and re-rate selected importance factors. The draft documents will then be published again for public comment in the FRN.

The NRC discussed a voluntary electronic registration process for the GFE. The new process will provide an electronic form that automates parts of the registration process and is more secure and efficient. The NRC staff discussed research on the generic fundamentals examination (GFE) regarding the development of an examination using only examination bank test items. The NRC staff concluded that using only bank questions would challenge the validity and reliability of the current GFE process because the questions could be answered using pattern recognitions, undermining the validity assumption that the entire body of knowledge has been learned. The NRC is working to improve the efficiency of the GFE process and is continuing to explore an electronic platform to administer GFEs in the future. For further details on the GFE research, the technical report is available at the Agencywide Documents Access and Management Systems (ADAMS) Accession No.ML17355A458.

The NRC discussed its reduced flexibility in supporting licensee requested dates for NRC administered initial license examinations due to budget constraints and the limited number of examiners. The NRC is looking to improve the efficiency of scheduling initial license examination by creating a national examination scheduling tool. This tool will have the ability to manage qualified examiners and track initial license examinations in order to efficiently apply resources to the initial license examination program.

The NRC provided an update on the status of Operator Digitized Docket (ODD) and the initial rollout of the electronic GFE (eGFE) registration option. The ODD process was piloted at Sequoyah for ODD. There will be four more pilots in the regions before ODD opens to all nuclear power plants by September 2018.

The NRC discussed new reactor activities including the design review of the NuScale license application; a status of accreditation activities for Vogtle, Units 3 and 4; the need to conduct NuScale examiner training in June of 2018; and the need to develop a new K&A catalog for NuScale facilities which will require a future update to NUREG-1021. A public meeting on NuScale will be scheduled later this year. INPO mentioned the accreditation training process of NuScale will need to be evaluated.

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. INPO explained that leadership development seminars focus on individual and common learnings, training material, and support of training in the classroom from the first line of supervisors to the board of directors, including an overview of instructor led training. New training programs have been created for operation managers and shift managers with a focus on leadership and conservative decision making. INPO reported that about 2100 nuclear professionals received training annually. New training courses were created for new shift managers. New training has been created on the 12 points of the perfect plant and 12 points of perfect training, and operations performance leader to improve operations performance.

Other Items of Mutual Interest Related to Training

INPO provided an update on several revised ACADs and will be providing copies to the NRC. INPO requested the NRC to recommence writing "The Annual Report on the Effectiveness of

Training in the Nuclear Industry.” INPO stated this report provides INPO a status on the health of the NNAB process. The NRC has taken INPO’s request under consideration.

Public

Robert Meyer from the Professional Reactor Operator Society stated that retirements have resulted in a high amount of turnover of licensed operators and training instructors throughout the industry.

Closing Remarks

In closing, the NRC stated that interactions between INPO and the NRC were useful and should continue. No final positions were taken during the meeting.

M. Miller

SUBJECT: SUMMARY OF THE 2018 ANNUAL UNITED STATES NUCLEAR REGULATORY COMMISSION/INSTITUTE OF NUCLEAR POWER OPERATIONS COORDINATION MEETING ON TRAINING-RELATED ISSUES DATED JUNE 18, 2018

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OFFICE	DIRS/IOLB	DIRS/IOLB
NAME	B Litkett	CCowdrey for N Salgado
DATE	6/13/18	6/18/18

Official Record Copy

ATTENDEES

INPO-NRC Coordination Meeting, May 21, 2018

Nuclear Regulatory Commission

Michael King, Deputy Director, NRR
Nancy Salgado, Chief, Operator Licensing Branch, NRR
Bernard Litkett, Operator Licensing Branch, NRR
Lauren Kent, Human Performance, Operator Licensing & ITAAC Branch, NRO
Robert Krsek, Commissioner's, Baran's Technical Assistant for Reactors
Olivier Lareynie, NRO, a foreign assignee from the French Nuclear Safety Authority

Institute of Nuclear Power Operations

Lisa Brattin, Senior Vice President, Workforce Training, Education and Proficiency
George Manaski, Director, Industry Training and Proficiency
Debbi Williams, Director, industry Learning
Terry Maund, Manager, Learning Delivery
Don Crump, Senior Program Manager
James Caulk, Senior Evaluator
Michelle Martel, Evaluator

Others public members in attendance

Jana Bergman, Curtiss-Wright/ Scientech

Others connected via Telephone Bridge

Robert Meyer, Professional Reactor Operator Society

PUBLIC MEETING AGENDA

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

May 21, 2018, 11:00 am to 1:00 pm

U.S. Nuclear Regulatory Commission
NRC One White Flint North
11555 Rockville Pike – Room OWFN-3B04
Rockville MD 20852

TOPICS

- 11:00 Introductions and Opening Remarks
- 11:10 Accreditation Update
- 11:30 Regulatory Issues
- 11:50 Industry Learning Activities
- 12:10 Other Items of Mutual Interest Related to Training
- 12:30 Public Input Including Questions and Answers
- 12:50 Closing Remarks
- 1:00 Adjourn

Upward Trend of Overall Pass-Rate For ROs and SROs

