

May 23, 2012

MEMORANDUM TO: Ho Nieh, Director  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

FROM: John McHale, Chief **/RA/**  
Operator Licensing and Training Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE 2012 ANNUAL U. S. NUCLEAR REGULATORY  
COMMISSION/INSTITUTE OF NUCLEAR POWER OPERATIONS  
COORDINATION MEETING ON TRAINING-RELATED ISSUES

On April 26, 2012, a periodic public U. S. Nuclear Regulatory Commission (NRC)/Institute of Nuclear Power Operations (INPO) coordination meeting on training-related issues was held at NRC Headquarters, Rockville, Maryland. Such meetings are conducted in accordance with the NRC/INPO Memorandum of Agreement dated December 10, 2007. 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); Regional Operator Licensing Branch Chiefs; INPO's Training and Accreditation and Industry Evaluation Divisions, and three members of the public (participating via telephone conference bridge). The list of meeting attendees is provided as Enclosure 1. The meeting agenda is provided as Enclosure 2. 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 and NRC and INPO personnel present was conducted. NRC and INPO provided opening remarks. As part of the opening remarks, INPO and NRC discussed organizational changes since the 2011 Coordination Meeting, including the addition of two NRC nominees to the National Nuclear Accrediting Board.

### **Accreditation Update**

INPO conducted 36 Accreditation Visits and 38 Accreditation Boards in 2011. NRC observed two Accreditation Team Visits (ATV) and observed seven of twelve accrediting boards during calendar 2011.

INPO reported good industry support, in the form of peer members, for ATVs. INPO continued to provide mid-cycle accreditation assistance to facilities to improve facility training programs and the implementation of training.

INPO issued Appendix A to ACAD 10-001, "Guidelines for Initial Training and Qualification of Licensed Operators." The purpose of the appendix is to highlight best practices associated with

qualifying licensed operators. This appendix includes topics such as training program oversight, candidate selection, program design, preparing license candidates, initial operator training progression and oversight, examination strategy, examination validation, and operations training to support the station operations pipeline.

INPO conducted an Examination Developer Course three times last year to help licensees better understand examination standards in NUREG 1021, "Operator Licensing Examination Standards for Power Reactors" The NRC requested to be informed of any insights learned from teaching the course that could result in improved clarity of the NUREG.

### **New Reactor Accreditation Update**

INPO conducted the first new reactor ATV at Vogtle 3 and 4 in October, 2011. The National Nuclear Accrediting Board accredited the Vogtle 3 and 4 Operations training programs in March 2012 in accordance with ACAD 08-001R1, *The Process for Initial Accreditation of Training in the Nuclear Power Industry*. As outlined in ACAD 08-001, additional accreditation visits focused on evaluating the implementation and evaluation phases of training at Vogtle 3 and 4 are planned to begin later this year, and NRC personnel will be notified as these visits are scheduled. Upon completion of regulatory observations of the implementation and evaluation phases, the requirements of 10CFR50.120 will have been successfully implemented. V. C. Summer Operations training programs are scheduled for an ATV in June 2012.

New reactor initial accreditation typically occurs three to four years prior to fuel load with renewal of accreditation one year prior to fuel load.

INPO is participating on an NEI conference committee to prepare for accrediting of training for utilities involved in small modular reactors.

### **Regulatory Issues**

The NRC issued an Advanced Notice of Proposed Rulemaking in response to Recommendation Eight of the Fukushima Near-Term Task Force. This recommendation endorsed the strengthening and integration of emergency operating procedures, severe accident management guidelines, and extensive damage mitigation guidelines using the rulemaking process. The NRC invited INPO and industry comments during the 60 day comment period.

The NRC discussed insights from implementing a revision to Inspection Procedure 71111.11, "Licensed Operator Requalification Program" which was updated in December 2011. The intent of the revision was to enhance the focus on operator performance within the scope of inspection activities.

The NRC issued Regulatory Guide 1.149, "Nuclear Power Plant Simulation Facilities for Use in Operator Training and License Examinations and Applicant Experience Requirements," revision 4, in April 2011. The NRC is encouraging licensees to voluntarily adopt the new revision. The NRC reported that about half of the plant reference simulators plan to be using the scenario-based testing approach by the end of 2012.

The NRC mentioned that work continues to update ANSI 3.4 "American National Standard for Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear

Power Plants” to incorporate advances in medicine and medical terminology and to provide additional clarity to specific medical requirements.

### **Operator Fundamentals**

INPO revised the plant evaluation process to better focus on operator fundamentals and conservative decision making in the control room. INPO reported that the revised process makes training scenarios in the simulator more realistic and challenging. Specifically, scenarios run longer, include scripted distracters, and limit available crew size to actual shift staffing levels. The revised process evaluates more crews and more positions, and adds post scenario technical interviews during plant walkthroughs with licensed and non-licensed operators.

### **NANTel Update**

The National Academy for Nuclear Training e-Learning (NANTeL) system is a national web-based system that provides standardized, generic training for the supplemental workforce that satisfies the industry and the insurer. INPO continues to see benefits from the centralized learning system and reported that the number of course completions increased about 100,000 in 2011.

### **Other Items of Mutual Interest Related to Training**

There was a short discussion of how the new Fukushima requirements, hardened containment vents and spent fuel pool instrumentation, would be incorporated into licensed operator training.

Robert Meyer from the Professional Reactor Operator Society discussed his top three concerns that impact licensed operators, specifically, new requirements from the Fukushima accident, initial licensing training, and the impact of the Fatigue Rule (Subpart I of 10 CFR 26, “Fitness for Duty Programs”).

INPO mentioned the industry effort to revise the knowledge and abilities catalogs (NUREG’s 1122 and 1123) to update the catalogs.

### **Closing Remarks**

In closing, it was decided that additional meetings related to the training and qualification of reactor operators will be held. No final positions were taken during the meeting.

CONTACT: David Allsopp, NRR/DIRS/IOLB  
301-415-3073

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DATE	05/ 22/2012	5/23/2012

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**ATTENDEES**

**INPO-NRC Coordination Meeting, April 26, 2012**

**Institute of Nuclear Power Operations**

David Igyarto, Vice President Industry Training and Accreditation, and Executive Director of the National Academy

Steve Johnson, Director, Accreditation

Elizabeth Brattin, Director, Industry Learning

Mike Llewellyn, Accreditation Team Manager

Kerry Wright, Accreditation Team Manager

Tammy Love, Manager-Operations

**Nuclear Regulatory Commission**

Bruce Boger, Deputy Director for Reactor Safety Programs, NRR

Laura Dudes, Director, Division of Construction Inspection and Operational Programs, NRO

Ho Nieh, Director, Division of Inspection and Regional Support, NRR

John McHale, Chief, Operator Licensing and Training Branch, NRR

Michael Junge, Chief, Operator Licensing and Human Performance Branch, NRO

Donald Jackson, Chief, Operations Branch, RI

Charles Phillips, Acting Chief, Operations Branch, RIII

David Allsopp, Operator Licensing and Training Branch, NRR

Richard Pelton, Operator Licensing and Human Performance Branch, NRO

John Munro, Operator Licensing and Training Branch, NRR

Mark Lintz, Operator Licensing and Human Performance Branch, NRO

Chris Cowdrey, Operator Licensing and Training Branch, NRR

Sean Currie, Operator Licensing and Training Branch, NRR

**Other**

Dave Mullen, International Brotherhood of Electrical Workers

David Klugh, NuScale Power, LLC

Robert Meyer, Professional Reactor Operator Society

AGENDA FOR PUBLIC MEETING  
WITH INPO ON TRAINING AND QUALIFICATION

April 26, 2012  
12:30 p.m. - 3:00 p.m.  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike -- Room O-13D20  
Rockville, MD 20852

TOPICS

- Introductions and Opening Remarks
- Public Input
- Accreditation Update
- New Reactor Accreditation Update
- Regulatory Issues
- Industry Learning Initiatives
- Operator Fundamentals
- Other Items of Mutual Interest Related to Training
- Public Questions and Answers
- Closing Remarks