

June 1, 2010

MEMORANDUM TO: Frederick D. Brown, Director
Division of Inspection and Regional Support
Nuclear Reactor Regulation

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

SUBJECT: SUMMARY OF THE 2010 ANNUAL U. S. NUCLEAR REGULATORY
COMMISSION/INSTITUTE OF NUCLEAR POWER OPERATIONS
COORDINATION MEETING ON TRAINING-RELATED ISSUES

On May 6, 2010, 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. Participants included representatives of the NRC's Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation (NRR); NRC's Division of Construction, Inspection, and Operational Programs, Office on New Reactors (NRO); Regional Operator Licensing Branch Chiefs; and INPO's Training and Accreditation Division. 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/INPO provided opening remarks. As part of the opening remarks, INPO and NRC discussed organizational changes since the 2009 Coordination Meeting.

INPO focus areas include accountability for adverse trends and issues; advancing performance in management, leadership, and safety culture; and workforce development. In addition, INPO continues to advance nuclear safety worldwide.

The NRC stated the agency is preparing for the Integrated Regulatory Review Service review of the NRC regulatory process and comparing the NRC process to international standards.

Accreditation Update

INPO conducted 29 Accreditation Visits in 2009. NRC observed one Accreditation Team Visit (ATV) and observed seven of nine accrediting boards during calendar 2009.

INPO reported good industry support, in the form of peer members, for ATVs. To improve facility accreditation skills, INPO is:

- Conducting three Accreditation Self-Accreditation Report workshops per year using peers,
- Providing mid-cycle accreditation assistance,
- Conducting an annual Training Director meeting,
- Conducting training for new training managers to clarify responsibilities and commitments,
- Conducting new supervisor training, and
- Conducting Instructional Technology workshops to introduce new instructional technologists to nuclear training

The Engineering Support Personnel accredited training program is being updated to reflect changes in the industry and technology. A draft of the new program is expected by the end of calendar 2010.

ACAD 10-001, "Guidelines for Initial Training and Qualification of Licensed Operators," has been issued. This ACAD was developed in conjunction with INPO, NRC, and the industry to modify the eligibility guidance based on eligibility equivalency requests received by the NRC. The ACAD is expected to be used by all facilities starting in 2011. INPO is working on a listing of frequently asked questions related to eligibility requirements.

Training focus areas are determined annually based on accreditation results. Training focus areas are considered by each facility in the Accreditation Self-Evaluation Report.

Accreditation focus areas include:

- Turnover of senior training managers and supervisors.
- Systems Approach to Training (SAT) fundamentals and how the training programs are maintained using SAT fundamentals.
- New and supplemental workers, including turnover of the workers, worker training, worker introduction to the nuclear culture, and how acceptance and assimilation of the safety culture is validated.
- Licensed operator training, including room for improvement in successfully completing initial training, improvements in throughput, increases in candidate monitoring and mentoring, increased emphasis on sharing industry best practices, conducting initial exam assist visits, and posting licensed operator training data on the web for industry to share.
- Evaluate the potential for shortening the licensed operator training program. One avenue is the use of local community college programs. Facilities are sometime reluctant to apply for an experience and education waivers due to uncertainty over approval and impact on the accreditation process.

New Reactor Accreditation Update

INPO is working with the NRC, South Texas Units 3 and 4 (STPNOC), Vogtle Units 3 and 4 (VEGP), and V. C. Summer Units 2 & 3 (Summer), to modify the operator licensing process. INPO expects to receive initial accreditation requests from STPNOC, VEGP, and Summer during 2011. New reactor initial accreditation is expected three to four years prior to fuel load with renewal of accreditation within one year of fuel load.

Regulatory Issues

The NRC stated that Draft Regulatory Guide DG - 1248, "Nuclear Power Plant Simulation Facilities for Use in Operator Training, License Examinations, and Applicant Experience Requirements" will soon be issued for comment. Draft Regulatory Guide DG - 1248 accepts and endorses: 1) ANSI/ANS-3.5-2009, "Nuclear Power Plant Simulators for Use in Operator Training and Examination," and 2) NEI-09-09, Revision 1, "Nuclear Power Plant-Referenced Simulator Scenario Based Testing [SBT] Methodology."

Future of Learning

The Future of Learning is fully staffed with three instructors conducting instructor certifications. Instructor certification is a two-week blended training program. Blended training programs have curricula that can incorporate all methods of training including web-based, face-to-face, discussion boards, and individual activities. The instructor certification blended training program was pilot tested last year and is now fully implemented. With the exception of the last three days of training, the program is fully transportable. The last three days include instructor observation and feedback. To date, 80 instructors have completed the program which includes "new generation training" as part of the curriculum. Final instructor qualification is the responsibility of the facility and is linked to accreditation.

A Learning Content Management (LCM) system is being developed. LCM is a pool of common training material shared by the industry with partitions to allow storage of facility specific material. LCM system training will be presented this year at Dominion. It is expected that LCM will be implemented industry wide next year. The LCM system offers several advantages, such as stronger configuration controls, a single set of lesson plans that can be easily updated based on operating experience, improved training program efficiency and effectiveness, examination generating capability, and customized training.

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. All U.S. nuclear power plants have agreed to accept training delivered through NANTeL. Qualification of the individual remains the responsibility of site.

INPO reported that the use of NANTeL is increasing and is being added to facility outage and support contracts to require personnel training prior to arrival on site. Significant Operating Event Report training is now web based, and fatigue rule training is being incorporated into existing course sources.

INPO is working with the industry to evaluate changes in the effectiveness of training since the implementation of NANTeL. INPO is also working on a five year program plan to increase its

international use, and to expand the use of the LCM system. An update to the NANTeL software is expected in 2011.

Other Items of Mutual Interest Related to Training

INPO stated that as part of the Uniform Curriculum (UC) effort, core knowledge recommendations for the chemistry technician, maintenance technician, health physics technician, and non-licensed operator training programs have been incorporated into INPO ACAD 08-006, "Uniform Curriculum Guide for Nuclear Power Plant Technician, Maintenance, and Nonlicensed Operations Personnel Associate Degree Programs." Utilities have increased the number of partnerships with local colleges and universities, reducing the amount of required on-site training. The certificates issued to graduates of an UC program state the individual has completed a UC program and does not have to repeat training they have already received. The question has been raised as to whether an individual trained by one utility and not hired would receive credit for the training by another utility. UC courses are considered "High Honors" courses and typically require a grade of 80% or higher to receive credit.

The representative from American Nuclear Society Standards Committee reported the following:

ANSI/ANS 3.5-2009, "American National Standard Nuclear Power Plant Simulators for Use in Operator Training and Examination," has been completed.

The ANSI 3.4 working group (ANSI/ANS-3.4-1996, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants") has met several times and is scheduled to meet next in July, 2010.

The ANSI 3.1 working group (ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants") has been delayed in meeting due to retirement and transfer of working group members.

Closing Remarks

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

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OFFICE	DCIP/COLP	DIRS/IOLB	DIRS/IOLB
NAME	RPelton	DAllsopp	JMcHale
DATE	6/01/2010	6/01/2010	6/01/2010

ATTENDEES

INPO-NRC Coordination Meeting, May 6, 2010

Institute of Nuclear Power Operations

Phil McCullough, Vice President, Training and Accreditation
Pete Knoetgen, Director, Accreditation
George Hutcherson, Director, Industry and External Relations
Kim Dahlberg, Industry Leadership and Development
Michael Marler, Future of Learning Initiative
Elizabeth Brattin, NANTeL

Nuclear Regulatory Commission

Bruce Boger, Deputy Director, NRR
John Tappert, Deputy Director, Division of Construction, Inspection, and Operational Programs, NRO
Fred Brown, Director, Division of Inspection and Regional Support, NRR
Jack McHale, Chief, Operator Licensing and Training Branch, NRR
Michael Junge, Chief, Operator Licensing and Human Performance Branch, NRO
Mark Haire, Chief, Operations Branch, RIV
Tim Kolb, Operator Licensing and Training Branch, NRR
John Munro, Operator Licensing and Training Branch, NRR
David Allsopp, Operator Licensing and Training Branch, NRR
Richard Pelton, Operator Licensing and Human Performance Branch, NRO
Mark Lintz, Operator Licensing and Human Performance Branch, NRO

Other

Dr. Michael W. Platt, PMP
Staff Systems Engineer
Human Performance Engineering
Lockheed Martin Simulation, Training & Support, connected via telephone bridge

Leonard Kabana, MNES

Timothy Dennis, ANS Standards Committee

AGENDA FOR PUBLIC MEETING
WITH INPO ON TRAINING AND QUALIFICATION

Thursday, May 6, 2010
9:30 a.m. - 2:00 p.m.
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike -- Room O3-B4
Rockville, MD 20852

TOPIC

- Introductions and Opening Remarks
- Public Input
- Accreditation Update
 - ACAD Revisions
- New Reactor Update
 - Initial Licensing Activities
- Future of Learning
- Regulatory Issues
 - Regulatory Guide Update
 - Eligibility
- NANTeL Update
- Training Focus Areas
- Other Items of Mutual Interest Related to Training

CONTE

- Leadership & Development Seminars
- Uniform Curriculum
- Public Questions and Answers
- Closing Remarks