

July 09, 2007

MEMORANDUM TO: Bruce A. Boger, Associate Director
Operating Reactor Oversight and Licensing
Office of Nuclear Reactor Regulation

FROM: Elmo Collins, Director **/RA/**
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE 2007 ANNUAL U. S. NUCLEAR REGULATORY
COMMISSION/INSTITUTE OF NUCLEAR POWER OPERATIONS
COORDINATION MEETING ON TRAINING-RELATED ISSUES

On May 17, 2007, a periodic public U. S. Nuclear Regulatory Commission (NRC)/Institute of Nuclear Power Operations (INPO) coordination meeting on training-related issues was held at INPO Headquarters, Marietta, Georgia. Such meetings are conducted in accordance with the NRC/INPO Memorandum of Agreement dated November 14, 2005. 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 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. Information presented by INPO at the meeting is available in the NRC Agency wide Documents Access and Management System (ADAMS) under Accession No. ML071550153. A summary of the discussions related to key agenda topics covered during the meeting follows.

Welcome and Opening Remarks

Introductions of the members of the public and NRC and INPO personnel present were conducted. NRC/INPO provided opening remarks. As part of the opening remarks, INPO and NRC discussed organizational changes since the 2006 Coordination Meeting.

Accreditation Update

As of May, 2007, training programs at two facilities, one technical training and one operations training, are on accreditation probation. The 2006 Training Warning Flags letter was sent to the industry's Chief Nuclear Officers earlier this year. Included in this year's letter were actions that could be taken if any warning flags were identified at a facility. The warning flags are:

Leadership and ownership - for example, decreasing line management support of training committees.

Conduct of training and trainee evaluation - for example, decreasing line management support for oversight of training evaluations.

Self-assessments - corrective actions taken are not fixing and preventing reoccurrence of training problems.

Training organization isolation.

Use of the systematic approach to training.

Training resources and expertise - instructors not prepared to conduct training for a variety of reasons.

Distractions impacting training - for example, training managers are being assigned responsibility for emergency planning and as Human Performance Coordinators.

In the continuing effort to improve the effectiveness of accreditation teams, each accreditation team includes an active industry training manager acting as the Industry Advisor. Accreditation team peer evaluators are now required to be training manager direct reports. Requiring peer evaluators to be training manager direct reports has improved the qualification level of the evaluators with the result that any issues identified are better developed. Each operations accreditation team also includes an evaluator, familiar with the licensed operator examination development process, charged with evaluating the exam development process and adherence of uniform conditions to the requalification exam development.

The National Nuclear Accrediting Board has completed a self-assessment and reported that while the report was very positive, there were still actions to take in the area of training and orientation of the Board members.

Leadership Development Initiatives

INPO reported the following:

The National Nuclear Accrediting Board is participating in a program at Goizueta Directors Institute at Emory University in support of the Board's informed governance role in commercial nuclear electric corporations. The program concentrates on proactive ways to integrate independent oversight responsibilities while strengthening the nuclear safety culture.

61 of 65 current senior nuclear plant managers have attended the Senior Nuclear Plant Manager course.

"Next Level" Leadership Seminars are being offered to Maintenance, Chemistry, Health Physics, Engineering, and Operations Managers (Shift Managers) using non-nuclear examples to focus on the organizational rather than the technical aspects of the issue.

The Educational Assistance Program, a partnership between universities and colleges offering nuclear courses, INPO, and several utilities, continues with good results.

National Academy Document Revisions

Two Academy documents, "Guidelines for Continuing Training of Licensed Personnel," ACAD 07-001, which supersedes "Guidelines for Continuing Training of Licensed Personnel," INPO 86-025 and "Guidelines for Simulator Training," ACAD 07-002, which supersedes "Guidelines for Simulator Training," ACAD 90-022 were issued in January and are to be implemented by June. Both guidance documents were revised due to the age of the documents. Licensed operator requalification examination standard practices intended to promote consistency in the content and rigor of requalification examinations has been added to ACAD 07-001. Training strategies for reinforcing sound operator fundamentals, as discussed in SER 03-05, "Weaknesses in Operator Fundamentals", has been added to ACAD 07-001 and ACAD 07-002.

Regulatory Issues

NRC representatives mentioned the difficulties that were being encountered in scheduling Operator Licensing Focus Group meetings with the Nuclear Energy Institute and the industry.

Scenario-based testing and ANSI/ANS-3.5-1998, "Nuclear Power Plant Simulators for Use in Operator Training and Examination," was discussed, specifically the desire of the NRC to have the industry accept one standard.

The NRC announced that revisions to NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized Water Reactors," NUREG-1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Boiling Water Reactors," and the supplement to NUREG-1021, "Operator Licensing Examination Standards For Power Reactors," revision 9 had been published for public comment.

NRC stated that an in-depth review of the reactor oversight process (ROP) will be undertaken to determine whether resources are being focused in the appropriate areas. The outcome of the analysis will determine whether the agency needs to make any changes to inspection procedures, addition or deletion of inspection requirements and increase or decrease in the number of samples, and whether there might be too much emphasis in some areas and not enough in others.

The apparent declining trend in operator exam performance was discussed. It was reported that NRC was evaluating licensed operator training through put and examination pass rates. INPO reported that Accreditation Team Visits (ATV) are increasing emphasis in this area.

New Reactor Training Accreditation

INPO's plan continues to be to treat new reactor licensees as an initial accreditation with an ATV and Accrediting Board prior to fuel load and startup. The objectives of the overall accreditation process for new reactors is to validate training content and implementation plans (initial accreditation), build on existing training materials (if available), capitalize on plant standardization and technology, and allow training to be conducted as part of an accredited program.

Initial accreditation will involve a review of the standardized training section and the site-specific training section. The standardized training section will consist of the job/task list(s), the task to training matrix, and training material samples (if available). The site-specific training section will consist of the job/task list(s), the task to training matrix, and training material samples (if available), training process descriptions, the training implementation plan including schedule(s) and staffing plans, and a description of training facilities. Initial accreditation will occur early in the construction phase.

An ATV, to verify implementation of the training programs accredited during initial accreditation, will occur prior to fuel load followed by an Accrediting Board decision as to whether to grant full Accreditation to the training programs. Following Accreditation, the newly accredited training programs will be incorporated into the existing accredited programs as appropriate. Completion of the technical and operations ATVs and Accrediting Board decisions will be completed prior to fuel load. The Accrediting Board decision prior to fuel load will be based on an ATV in accordance with criteria and objectives for currently accredited training programs.

INPO reported conducting bench marking trips to non-nuclear companies, to Japan and Electricite de France, to gather digital training insights. Future training will be different from current training, standardized, and conducted differently due to the learning techniques of future learners.

INPO is also evaluating the need to revise the education and experience eligibility guidance in ADAD 00-003, "Guidelines for Initial Training and Qualification of Licensed Operators," to accommodate the potential difficulty of meeting the current licensed operator eligibility requirements for the licensed operator applicants expected for the first wave of new reactor licensed operator examinations. NRC noted that we would remain open-minded to the modification of the eligibility guidance but we needed to ensure that NRR and NRO maintained alignment.

Operator Fundamentals

As part of ATV activities, the expected actions of SER 3-05, "Weaknesses in Operator Fundamentals," are being evaluated. Items evaluated include instructor familiarity with the SER, assessment of operator performance, and plans to address any operator weaknesses identified.

NRC noted the recent publication of Information Notice 2007-11, "Recent Operator Performance Issues at Nuclear Power Plants." Information Notice 2007-11 discussed examples of misalignments that rendered plant safety systems inoperable and instances in which operators did not control reactivity as specified in plant procedures.

NANTel Update

The National Academy for Nuclear Training has unveiled an eLearning program for "portable qualification" in the areas of radiation worker fundamentals and general employee training.

The training is intended to provide an industry process for common training and qualification of supplemental workers that satisfies the industry, the insurer, and the NRC. The training is available via the Web (<https://www.nantel.org/NANTELprod/nanteldefault.asp>) and uses the personnel access data system (PADS).

To date, more than 26,000 workers have participated in 110 courses hosted and completed more than 114,000 individual courses. Courses hosted include fitness for duty, radiation worker, human performance, and industrial safety. The system utilizes approximately 650 Administrators and 1400 proctors. The system has had a reliability factor of 99.6% to date for 2007.

Other Items of Mutual Interest Related to Training

Recent themes of ATVs were identified as:

- find and fix problems
- staffing
- operator and instructor performance
- training performance improvement
- fundamental training
- role of oversight in training
- reinforcement fo management expectations

Enclosures:

As stated

CONTACT: R. Pelton, NRO/DCIP/COLP
301-415-1028

The training is intended to provide an industry process for common training and qualification of supplemental workers that satisfies the industry, the insurer, and the NRC. The training is available via the Web (<https://www.nantel.org/NANTELprod/nanteldefault.asp>) and uses the personnel access data system (PADS).

To date, more than 26,000 workers have participated in 110 courses hosted and completed more than 114,000 course. Courses hosted include fitness for duty, radiation worker, human performance, and industrial safety. The system utilizes approximately 650 Administrators and 1400 proctors. The system has had a reliability factor of 99.6% to date for 2007.

Other Items of Mutual Interest Related to Training

Recent themes of ATVs were identified as:

- find and fix problems
- staffing
- operator and instructor performance
- training performance improvement
- fundamental training
- role of oversight in training
- reinforcement fo management expectations

Enclosures:
As stated

CONTACT: R. Pelton, NRO/DCIP/COLP
301-415-1028

DISTRIBUTION:

PUBLIC	M Sykes, RI	COLP Reading File
R Haag, RII	IOLB Reading File	H Peterson, RIII
RidsNroDcip	A Gody, RIV	RidsNroDcipColp
R Aiello, RII	RidsEDOMailCenter	R Lantz, RIV
RidsNrrAdro	K O' Donohue, TTC	RidsNrrDirs
Gregg Ellis	RidsNrrDirslolb	Robert Scillion
N Salgado	Robert Meyer	S Guenther
Bill Smith		

ADAMS Package Accession Number: ML071841260
 Meeting Notice Accession Number: ML071130098
 Meeting Handout Accession Numbers: ML071550153
 Meeting Summary Accession Number: ML071760032

OFFICE	COLP/DCIP	C/IOLB/DIRS	D/DIRS/NRR
NAME	R Pelton	N Salgado	ECollins
DATE	06/26/2007	06/25/2007	07/09/2007

ATTENDEES

INPO-NRC Coordination Meeting, May 17, 2007

Institute of Nuclear Power Operations

James Ellis, President and Chief Executive Officer
Phil McCullough, Vice President, Training and Accreditation
Kent Hamlin, Director, Accreditation
Clair Goddard, Director, Industry and External Relations
Kim Dahlberg, Manager, Industry Leadership Development
Elery Shoemaker, Accreditation Team Manager
Gary Fader, Director New Plant Deployment
Jim Maddox, Director New Plant Deployment
Bob Fletcher, Accreditation Team Manager
Jim Caulk, Project Manager

Nuclear Regulatory Commission

Bruce Boger, Associate Director for Operating Reactor Oversight and Licensing, NRR
Glenn Tracy, Director, Division of Construction and Operational Programs, NRO
Nancy L. Salgado, Chief, Operator Licensing and Human Performance Branch, NRR
Michael Marshall, Chief, Technical Specifications Branch, NRO
Fred Guenther, Senior Reactor Engineer, NRR
Richard Pelton, Training and Assessment Specialist, NRO
Robert Haag, Chief, Operations Branch, RII
Hironori Peterson, Chief, Operations Branch, RIII
Ryan Lantz, Operations Branch, RIV
Kathleen O' Donohue, Chief, Reactor Technology Training

Other

Robert Meyer, Professional Reactor Operator Society (connected via telephone bridge)
Bill Smith, Professional Reactor Operator Society (connected via telephone bridge)
Gregg Ellis, UNISTAR, EPR, Training Specialist
Robert Scillion, TVA, Browns Ferry , Operations Training Manager

AGENDA
INPO-NRC Coordination Meeting, May 17, 2007

Topic	Lead
Introductions and Opening Remarks	INPO/NRC
Public Input	Public
Accreditation Update	INPO
National Academy Document Revisions	INPO
Regulatory Issues	INPO/NRC
New Reactor Accreditation	INPO
Operator Fundamentals	INPO/NRC
NANTel Update	INPO
Other Items of Mutual Interest Related to Training	INPO/NRC
Public Questions and Answers	Public
Closing Remarks	