July 11, 2001

MEMORANDUM TO: R. William Borchardt, Associate Director

for Inspection and Programs

Office of Nuclear Reactor Regulation

FROM: Bruce A. Boger, Director /RA/

Division of Inspection Program Management

Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE ANNUAL NRC/INPO COORDINATION

MEETING ON TRAINING-RELATED ISSUES

On April 11, 2001, a periodic NRC/Institute of Nuclear Power Operations (INPO) coordination meeting on training-related issues was held at the INPO Headquarters, Marietta, Georgia. Such meetings are conducted in accordance with the NRC/INPO Memorandum of Agreement dated December 24, 1996. 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 Program Management and INPO's Accreditation Division. The list of meeting attendees is provided as Attachment 1. The meeting agenda is provided as Attachment 2. A summary of the discussions related to key agenda topics covered during the meeting follows.

## **Welcome and Opening Remarks**

Introductions of the NRC/INPO personnel present were conducted. After the introductions were completed, organizational changes since the last coordination meeting, at both the NRC and INPO, were discussed.

## **Results of the Training Improvement Task Force**

INPO presented and discussed a chronological overview of the outcomes of their accreditation visits. Technical programs at six (6) nuclear power plants were placed on INPO probation in calendar year (CY) 2000 by the National Nuclear Accrediting Board for training program deficiencies. This number of program probations was sufficiently high that INPO organized a Training Improvement Task Force to determine the underlying causes. The following common themes were identified:

- 1. Training was not a part of core business.
- 2. Training was conducted for training's sake and not seen as a tool to improve performance.
- 3. Weaknesses applied to technical and operator training programs.
- 4. Senior management was not engaged.

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Moreover, the following findings were contributors to these common themes:

- 1. Self-assessment was not rigorous.
- 2. Corrective action programs were weak.
- 3. Training performance indicators were not useful.
- 4. Accreditation visit preparation was viewed as a cyclical effort vice an ongoing effort.

#### **Continuation of Training Improvement Initiatives**

INPO has developed a conceptual model for Performance Improvement. This model integrates training, within the Systems Approach to Training (SAT), as only *one* element toward Performance Improvement. Where gaps exist in skills and abilities, training may likely be the solution; however, training is not the solution to all performance problems.

## **Discussion of On-line Training and Professional Development Seminars**

INPO and the industry anticipate a large turnover of personnel in the next few years to accommodate an aging workforce. Additionally INPO indicated that experience levels of personnel entering the nuclear industry are dropping due to fewer nuclear Navy trained personnel entering the applicant pool for new operators. To address the training challenges this will present, subject to industry acceptance, INPO is considering piloting --- as a voluntary plant effort --- a new approach toward professional development. In this approach, INPO would plan to develop "common training" unique to all plants to gain greater efficiency of training. This effort would focus upon initial training. Using a blended approach of combined on-line training with centralized small group training would achieve greater quality and efficiency. INPO also would plan to use generic fundamentals training for operators (GFES) as one of its early centralized training projects. INPO agreed to work with the NRC regarding interface issues with the GFES.

#### **MOA - A Discussion of its Effectiveness**

A discussion ensued on the effectiveness of the Memorandum of Agreement (MOA), effective 1996. INPO agreed that the MOA was working well.

#### **Operator Licensing and Requalification Issues**

The NRC highlighted the availability of Supplement 1 to the "Examination Standards" NUREG 1021, Rev. 8 and described the major changes that it contains. These changes eliminate unnecessary regulatory burden on licensees without adversely affecting the integrity of examinations. These changes are discussed in FRN 66 FR 20841 dated April 25, 2001.

With regard to the issue of eligibility for an operator's license, the INPO representatives indicated that they are receiving more questions since the NRC issued RIS 2001-01, "Eligibility of Operator License Applicants," dated January 18, 2001, and suggested that the NRC Regional Offices use their discretion in answering questions before referring facility licensees to INPO. On a related subject, the NRC noted that Supplement 1 to Revision 8 of NUREG-1021 has incorporated provisions that will allow applicants to defer portions of their experience and

training prerequisites until after they take their licensing examination, with the understanding that their license will be withheld until all of the applicable criteria are complete.

Regarding the pending Part 55 rule change that will allow applicants for operator and senior operator licenses to fulfill a portion of the required experience prerequisites by manipulating a plant-referenced simulator as an alternative to manipulation of the controls of the actual nuclear power plant, the NRC stated that the rule will not change the requirement for each applicant to complete an on-the-job-training (OJT) program which includes reactivity control manipulations.

INPO had expressed that they have had some difficulties surrounding the input of NRC license examinations into the format of its INPO examination bank. In some cases, data, such as knowledge and ability statements (KAs), did not appear during electronic transmissions of those exams from the NRC regions. NRC agreed to assist INPO as necessary to make any missing data complete.

INPO discussed the Generic Fundamentals Examination (GFE) and relayed some industry concern expressed over a perceived rise in examination difficulty levels. The NRC stated that the examination results have been constant over the past ten years with BWR and PWR mean scores hovering in the 89-91 range, indicative of a consistently moderate difficulty level.

The NRC noted that, while its staff has not identified any significant problems in licensed operator requalification programs, instances have been identified where there was excessive test item overlap among crews being tested in the same requalification cycle. INPO agreed that too much overlap might threaten examination integrity, but INPO has no evidence that this has occurred. INPO stated that leaks of examination content among crews was unlikely since crews are competitive and would not want any other crew to surpass their performance.

#### **INPO/Exelon Accreditation Working Group**

INPO is working with Exelon to review the accreditation objectives and criteria to determine if some aspects of accreditation can be accomplished at the corporate level. Notwithstanding the development of corporate-wide training, INPO indicated that they will still go to each site and accreditation will still be awarded on a plant-by-plant basis.

#### **Academy Partnerships**

INPO stated that it was venturing into a professional relationship with Ohio State University to provide training for managers in SAT and other training issues. In addition, INPO was conducting a Training Managers Workshop in 2001.

No other items were discussed. The meeting was adjourned at approximately 2:30 P.M.

Attachment: As stated

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\*See previous concurrence

OFC	IOHS/IOLB/DIPM	IOHS/IOLB/DIPM	IOLB/DIPM/NRR	DIR/DIPM/NRR
NAME	GUsova	DTrimble	GTracy	BBoger
DATE	05/30/01	07/06/01	07/06/01	07/11/01

#### **Attendees**

April 11, 2001 NRC/INPO Coordination Meeting On Training-related Issues

## INPO

Sig Berg, Executive Director, National Academy for Nuclear Training
Bill Fitzpatrick, Manager, Accreditation and Training Department
Phil McCullough, Vice President, Accreditation Division
Mark Peifer, Vice President, Industry and Government Relations Division
George Mortensen, Senior Evaluator, Operations Department
Mike Levitan, Assistant Manager, Accreditation and Training Department
Charlie Brooks, Staff Assistant, Industry and Government Relations Division
Dave Linnen, Manager, Training Activities Department
Rick LaRhette, Accreditation Team Manager
Sandy Hastie, Division Director, Training Division

#### **NRC**

Bruce Boger, Director, Division of Inspection Program Management Dave Trimble, Chief, Operator Licensing and Human Performance Section Fred Guenther, Senior Reactor Engineer George Usova, Training and Assessment Specialist

**ATTACHMENT 1** 

# AGENDA INPO-NRC Coordination Meeting, April 11, 2001

0730	Welcome and Opening Remarks.	INPO
	Discussion on INPO and NRC Organizational Changes	NRC
0800	Results of training improvement task force	INPO
0830	Continuation of training improvement initiatives:	INPO
0030	Performance improvement and SAT	11110
	Conduct of accreditation evaluations	
9:00	Break	
0915	Discussion on eTraining and professional development seminars	INPO
0045		N D G
0945	Update on regulatory changes affecting training	NRC
	Simulator manipulations/certification RIS01-001, Eligibility of Operator Licensees	
	(ACAD 00-003)	
10:15	MOU- a discussion of its effectiveness	
10:45	Break	
11:00	Operator Licensing Exam Issues	NRC
11.00	Trends and Feedback	
	Exam Bank/Web-based GFES exams	
	Training/ Exam Security	
	Supplement 1	
	Requal issues	
1200	Lunch and open discussion	
1230	Continuation of Operator Licensing Exam Issues	NRC
1330	INPO/Exelon Accreditation Working Group	INPO

1345	Academy partnerships with Universities, 2001 training managers'	INPO
	workshop	
1400	Closing Remarks	INPO
		NRC