

MAY 22 1986

DISTRIBUTION:

Central Files

MTB R/F

JPersensky

JBuzy

JKoontz

DMorrisseau

MRoe

WRussell

PDR

MEMORANDUM FOR: Harold R. Booher, Chief
Maintenance and Training Branch
Division of Human Factors Technology

Stewart D. Ebnetter, Director
Division of Reactor Safety, RI

FROM: Lee H. Bettenhausen, Chief
Operations Branch, RI

Joseph J. Buzy
Maintenance and Training Branch
Division of Human Factors Technology

SUBJECT: OBSERVATION OF THE INPO ACCREDITATION TEAM VISIT AT
THE PHILADELPHIA ELECTRIC COMPANY, PEACH BOTTOM ATOMIC
POWER STATION

Introduction

During the week of April 14, 1986, through April 18, 1986, Lee Bettenhausen, RI, and Joseph Buzy, DHFT, were NRC observers during the INPO Accreditation Team Evaluation at the Philadelphia Electric Company (PECO), Peach Bottom Atomic Power Station, for the following training programs:

- Shift Technical Advisor
- Technical Staff and Managers
- Instrumentation and Control
- Electrical Maintenance
- Mechanical Maintenance

The Accreditation Process

The accreditation process of PECO's Peach Bottom training programs is the same as described in previous NRC staff reports which have included summaries of the accreditation team visits. We have included a summary of significant milestones toward the accreditation of training programs at PECO's nuclear plants in the April 30, 1986, memorandum to H. Booher from S. Collins and J. Buzy regarding observations at Limerick. However, for this report, we wish to repeat some of the background for continuity.

PECO participated in development of the INPO Job/Task Analysis during the 1982-83 period. Peach Bottom's nonlicensed, control room (licensed), and senior operators' programs were reviewed by an accreditation team in August 1984 and were accredited in May 1985. During the period of February 24, 1986, through March 7, 1986, INPO accreditation teams reviewed all 10 of

OFFICE

SURNAME

DATE

8605300395 860522
PDR ADCK 05000277
P PDR

PECO's Limerick Station training programs. The five programs which are seeking accreditation at Peach Bottom were among those reviewed during the Limerick visit. The Limerick accreditation team leader and lead evaluators were the same personnel for the Peach Bottom visit. One INPO evaluator who had participated in the Limerick review was assigned a different program for the Peach Bottom visit.

Observations

Prior to the team visit at Peach Bottom, we attended the team training meeting which consisted of reviewing INPO's Objectives and Criteria. The training included additional emphasis in areas of feedback from operating experience for initial and continuing training, the need for remedial instruction to support students with problems and the need for plant support for on-the-job training (OJT) and OJT evaluation. Program evaluation using teams of content and process evaluators was encouraged, particularly during interviews. We found the pre-visit briefing beneficial and established a good working relationship among peer reviewers and INPO team members. The accreditation team members for the Peach Bottom review are listed in Enclosure 1.

The review process included review of training programs conducted at the Peach Bottom Station, PECO's Barbadoes and Limerick training facilities. We observed evaluations conducted at the Barbadoes facility for Electrical and Mechanical (E&M) Maintenance programs. In addition to the Barbadoes training and continuing on-site training for E&M programs, we observed evaluations of Shift Technical Advisor (STA) and the Technical Staff and Managers (TS&M) programs. The INPO accreditation visit was conducted in accordance with "Criteria for Accreditation of Training in the Nuclear Power Industry," INPO 85-002. The NRC observers utilized the "Accreditation Team Observation Visit Protocol" which is based on the Commission Policy Statement on Training and Qualification of Nuclear Power Plant Personnel, FR11147, USNRC, March 20, 1985.

The Barbadoes facility, a retired fossil plant, is in a well-suited setting for the conduct of training for craft personnel. PECO has utilized this facility for several years and the training staff understands their role in adapting craft training for nuclear power plants. The training needs of craft personnel have been defined by job/task analyses. Training programs are in progress for initial and upgrade training.

The team members, often content and process evaluators working together, were effectively organized and led. All members made significant efforts and contributions in their assigned areas. Discussion with members of content and process evaluators was uninhibited during the data gathering process and afternoon group and team meetings. Although the lead INPO staff members had participated in the recent Limerick accreditation visit and were in the process of preparing the final report for the Limerick programs, they did not discuss the Limerick concerns until the Peach Bottom evaluators had completed

OFFICE ▶							
SURNAME ▶							
DATE ▶							

their review or some information was needed to help resolve an open item by a team member. The content and process group leaders were effective in keeping their groups on schedule during the data collection, interviews and observations of training in progress. The group leaders were also very effective in response to questions raised by team members and provided directions for obtaining supporting data when issues were identified.

We observed data collection by the INPO team in reviews of the training program: administrative procedures; job/task analyses; evaluation of learning objectives; lesson plans; laboratory and OJT guides; instruction in classroom; training aids; student handouts; evaluations; feedback mechanisms and interviews with training and site staff including trainees and incumbents. We conclude that INPO data collection process was thorough and were able to correlate all but one item (team members practice for interviewing skills) in the Team Visit Protocol.

A possible concern regarding PECO staff members familiarity with the accreditation process was noted. After a morning meeting with the INPO team, we asked a foreman if he was familiar with INPO Criteria 85-002, "The Accreditation of Training in the Nuclear Power Industry." He replied he was not. After we obtained a copy of 85-002 from an INPO group leader, the foreman briefly reviewed the accreditation process including objectives and criteria and asked if he could have copies made for other foremen. Although PECO key personnel, instructors and department heads, had participated in development of the SERs, it appears that all lead personnel in the user's departments should also have an overall knowledge of INPO's accreditation process. Personnel at the level of foreman and shift supervisor and those who conduct OJT and other evaluations can provide positive influence in the program. However, in order to provide influence, they should know the entire process. This comment applies to personnel who are currently in supervisory positions and those who will replace them.

INPO Exit Meeting

During the exit meeting, the following unresolved items were among those that were discussed with the PECO staff:

- Program matrix needs more review.
(STA, E&M, I&C)
- Some lesson plan content cannot be linked to lesson plan learning objectives.
(STA, I&C)
- OJT needs to be better defined so evaluations can be more consistent.
(STA, E&M, I&C)
- Continuing training needs to be identified.
(TS&M, E&M, I&C)

OFFICE ▶							
SURNAME ▶							
DATE ▶							

Conclusions

- ° The INPO team and peer evaluators performed a thorough evaluation of the current Peach Bottom programs.
- ° The INPO team and group leaders were effective by: proper pacing of the review process; responding to the evaluator's concerns and insuring that supporting data was included to support unresolved items.
- ° Some of the unresolved items identified during the Limerick review were also confirmed in several Peach Bottom programs.
- ° All staff personnel should be familiar with the objectives in the INPO accreditation.

Original signed by:

Joseph J. Buzy
Maintenance and Training Branch
Division of Human Factors Technology

Original signed by:

Lee H. Bettenhausen, Chief
Operations Branch
Division of Reactor Safety, RI

PB TEAM VISIT/JJR4

OFFICE	MTB:DHFT	MTB:DHFT					
SURNAME	JBUZY:kb	JPersensky					
DATE	5/21/86	5/21/86					

Enclosure 1

INPO EVALUATION TEAM MEMBERS
PEACH BOTTOM ATOMIC POWER STATION
APRIL 14-18, 1986

Team Manager
Ralph Reed

Lead Content Evaluator
Sam Newton

Lead Process Evaluator
Robert Barmettlor

Content Evaluators
William Waylett - I&C
(FP&L)

Process Evaluators
J. D. Cantrell - I&C

Edward Frederick STA, TS&M
(GPU - TMI)

Fred Catolla STA, TS&M
(NYPA - Fitzpatrick)

John McCue, E&MM
(LILCO - Shoreham)

Steve Foster, EM
(SCE - SONGS)
Bill Gibson, MM

Jack Martin - Objectives 1 & 3

Observers - Lee Bettenhausen, NRC/Region I
Joseph Buzy, NRC/DHFT