UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
METROPOLITAN EDISON COMPANY	)	Docket No. 50-289
	)	
(Three Mile Island Nuclear Station, Unit No. 1)	)	

TMIA INTERIM COMMENTS ON B&W TRIAL RECORD

Joanne Doroshow
Louise Bradford

on behalf of:
Three Mile Island Alert
Intervenors

July 1, 1983

Shovlin: No. Right.

Wise: That just never came to your attention?

Shovlin: I am telling you right now, no.

Even assuming Shovlin is as forgetful as he claims, serious questions remain. How can the head of maintenance competently supervise his department when his subordinates do not inform him of important and potentially dangerous plant conditions -- an arrangement which he appears to find perfectly satisfactory? Moreover, how can it possibly be established that Shovlin has learned the lessons of the accident, the severity of which was caused in part by the incompetence of his own department, when he has no recollection of the circumstances surrounding any precursor event or malfunctioning component which caused or led to the accident? It is utterly irresponsible to permit him to continue as head of TMI-1 maintenance.

2. Training.

Licensee's training department has undergone intense scrutiny in the restart hearings because of the role improper training played in causing the accident. Company management's role is creating deficiencies in the training department, including significant and wide-spread instances of cheating, and management's response to correcting those deficiences has been the subject of much controversy. What the B&W record adds to this issue is demonstration that training problems were long-standing and well-recognized, and that the company did absolutely nothing about them until forced to do so after the accident.

A particular issue of controversy during the restart hearings was the adequacy of the requalification program and the related problem of the Licensee's policy on non-attendance and take-home make-up training packages and exams. Lax procedures created an environment which allowed Supervisor of Operations at Unit 2, Jim Floyd (VV), to cheat on his exam in July of 1979. PID ¶2272 et seq. B&W 462 is a March 1, 1977 Memo from Mr. Tsaggaris to a number of people, including Gary Miller, Jack Herbein, and L. L. Lawyer of the training department, concerning the Unit 2 on the job training program. Tsaggaris states in a handwritten comment,

> We are in trouble on this program! Progress for the last two weeks has almost been nonexistent. All groups have fallen way off the required curves... I don't know what the problem is but we had better find out now or we will never make it by 7-1. This matter will be discussed at G.P. Miller department head meeting on March 3, 1977.

On June 2, 1977, Miller sent to Lawyer a memo on the training program, in which he stated,

> ...As is typical with every startup, we are attempting to complete a year's worth of effort in about 6 months. The Unit 2 information at the critical detail level is just now becoming available in usable form.

B&W 774. Miller testified in his deposition that this memo meant that he did not feel the classroom training was directly applicable to the operation of the units. Miller dep. at 466.

On June 17, 1977, Unit 1 shift foreman T.L. Book sent the following handwritten letter to Unit 1 superintendent James P. O'Hanlon, who later reported it to Miller:

> Since taking the requal exam this past February, I have not been in a single training lecture or received any guidance as to what course of study to pursue to best fulfill the NRC requirements meaningfully.

> Also, I do not believe that sending out a casual memo or documenting on green sheets that an E.P. was read on back shift constitutes good training practice.
>
> Like all else the S/F & S/S's have become the Godhead of 60 hrs. required training per year. Its time to put training back in the training dept. where it belongs and in a responsible fashion. This means more training space, people and expertise. This also means 6 shifts for CRO's, S/F and S/S's.
>
> While I fully realize that there is no pat answer for our complex training problems, I like many other operations people have made suggestions to various training personnel. However it seems as though those fall on deaf ears or end up in the circular file. We have been told "write up your suggestions and concerns or call us." We did! Nothing happened.
>
> Besides being just plain frustrated over all of this, it is my opinion that it is somewhat erroneous to say we fulfill the NRC requirements when they are based on documentation of subject matter supposedly covered on shift. Many times more hours are documented than were actually used for training.
>
> I am willing to listen to or discuss anything on the topic with anybody. I am willing to help solve the problem if I can help in a meaningful way.
>
> Something must be done !!!

B&W 564; Miller dep. 477. Several months later, the 1978 management auditors made the following finding about the training department: "The quality of operations personnel is on a continuous downhill trend." B&W 843 at 45229. Miller voiced similar concerns in his post-accident investigation interview, B&W 360. There he stated,

> ... everytime I went to a shift foreman or shift supervisor meeting one of the single most emotional complaints was training. Lack of. Lack of real training.

B&W 360 at 2.

Among the major problems with training, including one of Floyd's most significant training shortcomings even after the accident, was the training non-attendance record. See PID ¶2274. B&W 304 is a September 1, 1978 memo by Beers, of the

training department, which states, "... but overall approximately 1/2 of the licensed people are not attending requalification training." In a November 2, 1978 memo, Beers writes to Miller, "decrease in attendance from last report." B&W 776. This caused training instructors to spend substantial amounts of time making up take-home training packages. Arnold Tr. 1703-1704. Even by late 1979, after the accident, the Glickman auditors found that cases existed where one could pass the licensing tests without taking any training session.

In addition, one of the more significant revelations of the B&W record was that Mr. Zechman, the acting supervisor of training, not only did not have his operator's license, but at a time of major training deficiencies within the department, a decision was made to have Zechman spend full time studying for his license, spending no time running the department. Arnold at Tr. 1706. Moreover, some time between the fall of 1978 and the accident, Zechman took the examination and failed to pass it. Id. Miller believed that the department suffered because of Zechman. B&W 360 at 29.

In Licensee' response to the NRC's Notice of Violation, dated December 5, 1979, the company downplays the seriousness of the training department problem. See p.33, supra. Licensee, however, assures the Commission that "[a] shift technical advisor has been added to the normal shift complement and substantial additional attention will be directed to the operating experience of similar reactors and the nuclear industry as a whole" and

"[a] major revision and expansion in the training programs for the operating organizations has been made ..."

Licensee' performance in meeting these objectives, as well as in correcting the indisputable problems unmasked by the accident, such as training's failure to prepare operators for actual emergency situations, can be quite accurately evaluated by again turning to the BETA, and RHR consultant reports produced this year. In particular, the reports make the following findings:

> -- There are a number of problems associated with the STA program...Our observation is that [proper STA's training] is not being done...There is a serious lack of understanding on the part of the Shift Supervisor... on the role of the STA... There is also a lack of understanding on the part of the STA's as to just what role they are to play, particularly during the vast majority of time that the plant is not in an abnormal mode. BETA at 70.
>
> -- There exists a lack of supervision of instructors in the TMI Training Department....In some cases, it was because supervisors who were present did not react to situations where instructors were not performing their assigned tasks....In other cases, it was noted that there just was not any supervision present.... It would seem that this finding should be unnecessary considering the seniority and experience level of the training staff....However, based on the observations made, there should be concern over classroom performance. BETA at 58.
>
> [*This finding is particularly significant since the ASLB made such supervision a condition for restart. PID ¶ 2421]
>
> -- too much emphasis is being placed on proving to the world that the training program is good and not enough on doing what should be done to produce a competent operator. BETA at 57.
>
> -- only 60% of those who responded agreed that the content of the last exams was job relevant and only 1/3 agreed that the oral portion of the exam tested how one would act in an emergency. RHR.
>
> -- most considered that the training department is not oriented to the needs of the operators. RHR.

> -- there is strong agreement that there is not enough training on plant conditions. RHR.
>
> -- operators complained of a lack of convergence between training, testing, and the ability to operate the plant. 3 out of 4 denied that training prepared individuals to pass exams and is successful at this but it doesn't prepare them sufficiently to operate. To compound this, what is taught in training is different from what they experience in the plant. RHR.

The validity of these findings was substantially confirmed by Administrative Judge Milhollin in his April 28, 1982 report on the reopened proceedings. Thus it appears that one of the most significant causes of the accident, one of particular concern to the Commission in its August 9, 1979 order, has not been rectified. Despite what arbitrary conclusions the ASLB chooses to draw, the Commission must recognize that with such problems still rooted in the training department, Licensee is simply unfit at this point to operate TMI.

3. Management structure.

The Commission has had difficulty throughout this hearing process attaching significance to the many organizational and operational pre-accident problems, because of Licensee's insistence that despite what may have gone on in the past, the organization has so significantly changed that those problems no longer have relevance. See, e.g., B&W 356, (GPU's final accident investigation report, "management" conclusion). However, what the B&W record illustrates and what the ASLB fails to acknowledge is that the most fundamental organizational problems at TMI have never related to the organizational structure of the company, but rather to the manner in which the organization functions. The most pervasive functional problem

June 4, 1984

UNITED STATES OF AMERICA
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BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

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METROPOLITAN EDISON COMPANY	)	Docket No. 50-289
	)	(Restart)
(Three Mile Island Nuclear Station, Unit No. 1)	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Licensee's Answer to TMIA Motion to Reopen the Record on Training Program Irregularities and Reportability of BETA and RHR Consultant Reports" were served this 4th day of June. 1984, by deposit in the U.S. mail, first class, postage prepaid, to the parties on the attached Service List.

Deborah B. Bauser

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