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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of)	
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METROPOLITAN EDISON COMPANY, ET AL.)	Docket No. 50-289 SP
)	(Restart Remand on
(Three Mile Island Nuclear Station,)	Management - Training)
Unit No. 1)	

NRC STAFF BRIEF IN RESPONSE TO INTERVENORS' APPEAL OF LBP-85-15

Mary E. Wagner
Counsel for NRC Staff

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I. INTRODUCTION

On May 3, 1985, the Licensing Board issued its partial initial decision on the remanded issue of licensed operator training at TMI-1. LBP-85-15, 21 NRC ___ (PID). The Board concluded that GPU Nuclear Corporation (Licensee) had made an appropriate response to the 1981 cheating episodes [1/] and to concerns of the Appeal Board set out in ALAB-772, 19 NRC 1193 (1984).

Intervenors Union of Concerned Scientists (UCS) and Three Mile Island Alert, Inc. (TMIA) have appealed the Licensing Board's

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1/ While finding Licensee's response appropriate, the Board nevertheless found one aspect of Licensee's training program deficient: there was no provision for any formal evaluation of trained operators in the job setting for the purpose of validating or revising the training program. The Board accordingly required that such formal

(FOOTNOTE CONTINUED ON NEXT PAGE)

decision. 2/ For the reasons set forth below, the NRC Staff opposes these appeals and believes the Licensing Board's partial initial decision should be affirmed in all respects.

II. STATEMENT OF THE CASE

In August 1981, after extensive hearings, the Licensing Board issued a decision favorable to Licensee on management issues, including the substantive adequacy of the TMI-1 licensed-operator training program. LBP-81-32, 14 NRC 381 (1981) (Management PID). At that time, because of newly-discovered evidence of cheating on NRC licensed-operator examinations, the Board retained jurisdiction to consider the impact of this new information on its findings and conclusions. Id. at 403. In September 1981 the Board reopened the management proceeding and appointed a Special Master to hear evidence on the impact of the cheating on the Management PID. Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), unpublished Licensing Board Memorandum and Order of September 14, 1981. Further hearings were conducted, culminating in a recommended decision by the Special Master and a partial initial decision by the Board.

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

evaluations be conducted and that Licensee devise an implementation plan for evaluation, and retained jurisdiction to consider the plan. LBP-85-15, slip op. at 154-55. By memorandum and order of June 24, 1985, the Board approved Licensee's plan for formal evaluation of trained operators in the job setting. See LBP-85-__, 21 NRC __ (1985).

2/ "Union of Concerned Scientists Brief on Appeal of the Partial Initial Decision on Licensed Operator Training," July 1, 1985 (UCS Brief); "Three Mile Island Alert's Appeal of the Licensing Board's Partial Initial Decision on the Remanded Issued of Licensed Operator Training at TMI," July 1, 1985 (TMIA Brief).

See LBP-82-34B, 15 NRC 918 (1982); LBP-82-56, 16 NRC 281 (1982). The Licensing Board found that there had been a breakdown in the integrity of Licensee's training and testing program and imposed several requirements directed at obtaining future assurance of the adequacy of the training program. LBP-82-56, 16 NRC at 300, 365, 384. The Board also concluded, however, that the identified weaknesses in the program did not undermine the Board's earlier decision on management issues. Id. at 301.

In ALAB-772, which culminated in this remand, the Appeal Board reviewed the entire record on the ability of Licensee's management to safely operate TMI-1. 19 NRC at 1201. While the Appeal Board endorsed the Licensing Board's characterization of the question that had to be answered following the cheating incidents at TMI-1, viz., "is the instruction adequate to prepare the operators to operate the plant safely?", it disagreed with the Licensing Board "on its affirmative answer to that question." Id. at 1232-33. The Appeal Board believed that the record in the reopened proceeding had perhaps raised more questions than it satisfactorily had answered. Id. at 1233.

In particular, the Appeal Board was concerned about the fact that in the reopened proceeding, the Licensing Board had not heard additional testimony from the panel of outside experts upon whom the Licensing Board had relied so heavily in initially approving the TMI-1 training programs. In 1980-81, these experts, known as the OARP Review Committee, had reviewed Licensee's training program and, while recommendations for improvement were made, the experts had strongly endorsed the program. See 19 NRC at 1210-11. The Appeal Board made clear that the "principal difficulty" with the Licensing Board's decision after the cheating

incidents was "the Licensing Board's failure to reconsider, as promised and in a meaningful way, its earlier finding that licensee's training program was 'comprehensive and acceptable.'" ALAB-772, supra, 19 NRC at 1233. Instead, the Licensing Board had relied on the post-cheating testimony of only Licensee and Staff. As the Appeal Board stated: "[T]he Board essentially presumed that the earlier, favorable expert testimony by the outside consultants would not have been altered by the cheating revelations." Id. In view of the significance of the testimony of the OARP Review Committee to the initial management decision, the Appeal Board found the absence of further testimony from these experts during the reopened hearings on cheating to constitute "a significant gap in the record." ALAB-772, supra, 19 NRC at 1234, 1237. Accordingly, the Appeal Board remanded "that part of this proceeding devoted to training, for further hearing on the views of Licensee's outside consultants (including the OARP Review Committee), in light of both the weaknesses demonstrated in Licensee's training and testing program and the subsequent changes therein." Id. at 1239.

Thus, the focus of the Appeal Board's remand of training is on the views of the OARP Review Committee concerning the cheating incidents. LBP-85-15, slip op. at 8. However, in Section III.C of ALAB-772, the Appeal Board raised numerous evidentiary questions about Licensee's training program, and the Committee endeavored, in both its Special Report prepared shortly after the issuance of ALAB-772 and in its pre-filed testimony, to address each of those questions and issues. Moreover, the Licensing Board did not interpret narrowly the Appeal Board's directive remanding the issue of training. LBP-85-15, slip op. at 8.

While noting that it could be argued that the Appeal Board had remanded the training issue solely to hear the views of Licensee's consultants, the Licensing Board ruled that the right of other parties to confront those views necessarily broadened the scope of the remanded hearing. See Memorandum and Order Following Prehearing Conference, July 9, 1984, at 3.

At the remanded hearing, Licensee did not limit its presentation to the issues specifically mentioned in ALAB-772. Instead, it presented its entire current licensed-operator training program for the Board's consideration, and UCS and TMIA challenged the substantive adequacy of the program. The Staff did not believe that a litigation of such breadth had been intended by the Appeal Board. 3/ While the Licensing Board agreed with the Staff on that point, it "also believed that it was prudent for the Licensee to defend its current program in its entirety, and, in the long run, probably just as efficient given the many facets of ALAB-772." LBP-85-15, slip op. at 11.

The Licensing Board concluded in LBP-85-15 that Licensee has made an appropriate response to the 1981 cheating episodes and to the concerns of the Appeal Board set out in ALAB-772. Id. at 11-12. The Board determined that there are four essential requirements to Licensee's response, each of which had been satisfied. Id. at 12. Briefly, these

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3/ The NRC Staff considered the remand to be limited to the views of the Licensee's outside consultants, including the reconstituted OARP Committee, about licensed operator training at TMI-1, taking into consideration the cheating and subsequent changes to the program. The Staff did not address the actual content of the training program in its testimony. Rather, it addressed the adequacy of the methodology used by the OARP Committee in responding to ALAB-772.

four elements are: management response to cheating; licensed operator attitudes; examination security; and improving the training program. Id. at 12-13. In sum, the Licensing Board found that the members of management who deemed themselves particularly responsible for the cheating episodes have conceded their failures and have persuaded the Board of their commitment to prevent any recurrence of cheating, and that communication lines had improved. Id. at 12. The Licensing Board found further that employee attitudes had improved and that restart of TMI-1 would likely alleviate any lingering attitude problems, and that examination security was "very tight" and effective. Id. While finding that the Licensee had substantially improved its training program, the Board nevertheless "found one aspect of the TMI-1 training program to be deficient. There is no provision for any formal evaluation of trained operators in the job setting for the purpose of validating or revising the training program." Id. at 14. To remedy this single defect, the Board imposed a requirement that formal written on-the-job evaluations of operator performance both during normal and abnormal operation be conducted, required an implementation plan for evaluation, and retained jurisdiction to consider the plan. Id. at 154-55. 4/ Consistent with its earlier report to the Commission, 5/ the Licensing Board reaffirmed its determination that the on-the-job evaluation requirement is a

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4/ See n.1 supra.

5/ See Licensing Board Response to CLI-85-2, LBP-85-10 (April 11, 1985).

long-term requirement within the meaning of the Commission's original notice of hearing on TMI-1 restart (CLI-79-8, 10 NRC 141, 148).

Intervenors UCS and TMIA have appealed from the PID. The Commonwealth of Pennsylvania, which participated in the proceeding as an interested state, filed no appeal.

UCS' appeal is limited to four specific aspects of the Licensing Board's decision. First, UCS claims that the Licensing Board, having found Licensee's training program to be inadequate in the area of post-training evaluation of operator performance, erred in authorizing immediate restart. Second, UCS argues that the Board erred in finding current TMI-1 operator attitudes to be acceptable on the basis of the evidence presented and the ground that attitudes will improve once TMI-1 is restarted. Third, UCS claims the Board erred in approving Licensee's oral examinations because they are administered by individuals neither trained nor qualified in the administration of oral examinations. Finally, UCS argues that the Board erred in accepting and relying on the testimony of a group of outside consultants known as the OARP Committee. 6/

TMIA has appealed six aspects of the Licensing Board's decision. TMIA argues (1) that the Board committed error in excluding from the proceeding the issue of the history of GPU's problems with training as it reflects on the competence and integrity of Licensee management; (2) that

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6/ The original OARP Review Committee from the 1980-81 timeframe was reconstituted after ALAB-772 with four of the original five members and one outside consultant who had not served on the original panel. PID at 167, ¶ 287. The reconstituted panel is referred to here as the OARP Committee.

the Board erred in several evidentiary and procedural rulings at the hearing; (3) that the Board erred in its findings on Licensee's written examinations and examination security; (4) that the Board erred in finding that operator attitudes are satisfactory; (5) that the Board erred in finding that the communication system between management and employees is sound; and (6) that the Board erred in its finding that Licensee's Management has acknowledged its failures and responsibility to prevent cheating.

III. ISSUES PRESENTED ON APPEAL

The issues raised by UCS' appeal are:

(1) Whether the Board's actions with regard to a plan for evaluation of post-training job performance were proper;

(2) Whether the Board's favorable decision on operator attitudes is supported by the record;

(3) Whether the Board properly relied on the testimony of the OARP Committee; and

(4) Whether the Board erred in ruling that Licensee's oral examination process is sound.

The issues raised by TMIA's appeal are:

(1) Whether the Board erred in excluding TMIA's subissue 4 on how Licensee's historical problems with training may reflect on Licensee management competence and integrity;

(2) Whether the Board erred in a series of evidentiary and procedural rulings at the hearing;

(3) Whether the Board's favorable findings regarding Licensee's written examinations and examination security are supported by the record;

(4) Whether the Board's conclusion that employee attitudes are "satisfactory" is supported by the record;

(5) Whether the Board's findings on management/employee communications are supported by the record; and

(6) Whether the Board's conclusion that Licensee management has acknowledged its failures and responsibility to prevent cheating is supported by the record.

The NRC Staff's views on these issues are set forth below.

IV. ARGUMENT

A. UCS' Appeal

UCS has appealed four specific aspects of the Licensing Board's decision. First, UCS claims that the Board acted improperly with regard to its imposition of a condition for evaluation of post-training job performance; second, that the Board's favorable decision on operator attitudes is not supported by the record; third, that the Board improperly relied on the testimony of the OARP Committee; and fourth, that the Board incorrectly ruled that Licensee's oral examination process is sound. For the reasons that follow, UCS' appeal should be denied in all respects.

1. The Licensing Board's Actions With Regard To A Plan For Evaluation Of Post-Training Job Performance Were Proper

UCS argues that the Board committed error in (a) treating the requirement for a plan for evaluation of trained operators in the job

setting as a "long-term" action under the Commission's 1979 Order and Notice of Hearing, 7/ (b) finding Licensee's proposed evaluation plan to be adequate without further hearings on the record, and (c) finding that submission of a proposed plan constitutes reasonable progress towards satisfactory implementation of a post-training evaluation program. UCS Brief at 7-14. These arguments are without merit as discussed below.

a. The Licensing Board Correctly Determined That The Condition On Licensee's Training Program Did Not Have To Be Met Prior To Restart

First, UCS argues that the issue on which it prevailed, i.e., the need for formal evaluation of operator performance in the job setting as feedback for training, is included in the "short-term" action to

> 1.(e) Augment the retraining of all Reactor Operators and Senior Reactor Operators assigned to the control room including training in the areas of natural circulation and small break loss of coolant accidents including revised procedures and the TMI-2 accident. All operators will also receive training at the B&W simulator on the TMI-2 accident and the licensee will conduct a 100 percent reexamination of all operators in these areas. NRC will administer complete examinations to all licensed personnel in accordance with 10 CFR 55.20-23.9.

CLI-79-8, 10 NRC 141, 144 (1979) (1979 Order). UCS Brief at 9-10. UCS' argument misconstrues the significance of the issue on which the Board found UCS had prevailed.

7/ In CLI-79-8, 10 NRC 141 (1979), in the aftermath of the TMI-2 accident, the Commission authorized a hearing and ordered TMI-1 to remain in a cold shutdown condition until the issuance of a further order by the Commission following (1) satisfactory completion by the Licensee of certain "short-term" actions and (2) reasonable progress by Licensee toward satisfactory completion of certain "long-term" actions.

The Board's concern which gave rise to the condition it imposed was not that there were no performance-feedback mechanisms, but rather that there was no periodic, formal mechanism for feedback from on-the-job performance. The Board framed the issue as follows:

> Licensee does not use periodic, formal on-the-job operator performance evaluations for training revision or for any other purpose after initial on-the-job training. This fact has been the basis for the most intensely disputed aspect of Licensee's training program, especially by UCS.
>
> * * *
>
> Below we find that UCS has prevailed on this issue. The Board will require a license condition correcting the void in Licensee's training program.

LBP-85-15, slip op. at 143-44.

Indeed, the Board concluded that, "[t]hough not formal, there are several methods by which the actual performance of operators may be considered in developing the training program." Id. at 148. These methods are discussed in the May 3 PID at pp. 148-151. The Board concluded that there are "very significant opportunities" for the actual job performance of operators to be evaluated and for the training program to be revised accordingly. Moreover, the Board stated that it "would expect that Licensee's training and operations personnel take full advantage of their opportunities informally to evaluate on-the-job performance and actually do so," and surmised that in fact Licensee modifies the training program as a consequence. Id. at 149-50. The Board further stated that informal, subjective evaluations are very useful, but explained that the Board was "not faced with choosing between judgmental, informal operator evaluations and formal periodic on-the-job performance evaluations. We can have both, and both should be employed

as useful." Id. at 151. It is in this context that the Board concluded that the training program "needs improvement" by requiring the conduct of formal written on-the-job evaluations of operator performance. Contrary to the impression UCS seeks to convey, this requirement does not indicate any fundamental flaws in the current training being given to the operators.

Viewed in this context, it becomes clear that this condition is not part of "short-term action" 1.(e) to augment the retraining of operators prior to restart of TMI-1. The Commission, in initiating this proceeding, directed the Licensing Board to determine what items had to be implemented prior to restart (the "short-term actions") and what items had to be implemented after restart (the "long-term actions"). The Licensing Board was also to determine whether Licensee "has demonstrated reasonable progress toward completion of the long-term actions described in this section." 1979 Order at 10 NRC 146.

The Licensing Board in its PID reaffirmed its earlier conclusion that the requirement of periodic, formal evaluations did not need to be met prior to restart. As the Board had earlier explained, "[f]ormal evaluation of operator performance in the job setting is almost by its very nature a function best performed after restart, although operators have important responsibilities during shutdown." LBP-85-10, 21 NRC ___, slip op. at 8 (1985). Finally, the Licensing Board in the PID stated that licensee will have demonstrated reasonable progress toward the completion of this requirement if it begins immediately to

develop and implement a plan for on-the-job evaluation and feedback. Slip op. at 216. 8/

The logic of the Licensing Board's decision is self-evident -- clearly there is little to evaluate in an operator's actual operating performance when the plant has been shut down for six years. Job performance can more meaningfully be measured while a plant is operating. Then those performance evaluations can be used to further refine the training program, if necessary. But performance evaluations of operators at a non-operating plant would be at most of minimal use in evaluating the adequacy of the training program. Therefore, the Licensing Board was entirely reasonable in holding that this condition need not be met prior to restart.

Accordingly, there was no error in the Licensing Board's determination that its condition is a "long-term action" under CLI-79-8.

b. UCS Has No Right To Litigate The Adequacy Of The Evaluation Plan Prior To Restart

UCS argues not only that is it entitled to litigate the adequacy of the evaluation plan prior to restart because the development and

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8/ The Commission in CLI-85-9 agreed with the Licensing Board "that job performance evaluations are best performed after a plant goes into operation, and that this condition need not be met prior to restart . . . . With regard to whether reasonable progress has been made on this item, the Board stated that licensee would demonstrate reasonable progress if it began immediately to satisfy the requirement. Licensee on May 28, 1985 submitted a proposed plan to satisfy this requirement. Under the terms of the Board's decision, this is sufficient to demonstrate reasonable progress." CLI-85-9, 21 NRC ___, slip op. at 41, n.58.

implementation of the plan is a "short-term action," but that it is entitled to litigate it prior to restart even if it is considered to be a "long term action." UCS Brief at 11.

UCS is mistaken in its argument that if the evaluation plan is considered a "long-term action" under the 1979 Order, it is entitled to a separate hearing on the plan itself. UCS Brief at 11-13. According to the Commission's Order and Notice of Hearing,

> The subjects to be considered at the hearing shall include:
>
> * * *
>
> (2) Whether the "long-term actions" recommended by the Director of Nuclear Reactor Regulation (set forth in Section II of this Order) are necessary and sufficient to provide reasonable assurance that the facility can be operated for the long term without endangering the health and safety of the public, and should be required of the licensee as soon as practicable.

CLI-79-8, 10 NRC at 148. Section II of the 1979 Order, which enumerates the "long-term actions" to be considered at the hearing, clearly does not encompass the Licensing Board's condition on evaluation, nor was it intended to encompass that or any other Board condition that might be imposed as a result of the hearing. Any Board conditions which might arise from the hearing resulted from the litigation in which the parties have participated, and do not give rise to a second hearing.

In any event, while there was no formal hearing on Licensee's plan, UCS and other parties were given the opportunity to submit their views on, and objections to, Licensee's proposed plan for the Licensing Board's consideration, and UCS did in fact submit such comments. This was more than UCS was entitled to, but nevertheless it allowed UCS to be heard on the plan.

In conclusion, there was no right to a hearing on the plan, UCS was heard in any event, and its claims of Licensing Board error in this regard are without merit.

c. The Board Ruling On "Reasonable Progress" Toward Completion Of An Evaluation Program Is Correct

The Licensing Board ruled that Licensee will have demonstrated reasonable progress toward the completion of the requirement to implement an evaluation plan "if it begins immediately to satisfy this requirement as provided in the order...." PID at 216. The order required Licensee, within thirty days, to present to the NRC Staff and other participants its proposal for an evaluation plan, and thereafter to submit the proposed plan to the Board with either the approval or disapproving comments of the parties. Id. at 216-17. UCS argues that, in effect, the Board decided that "submission of a plan would be enough regardless of what was in the plan." UCS Brief at 14. In so doing, UCS ignores the language of the Commission's 1979 Order. In that Order, the Commission asked the Licensing Board either to determine whether the Licensee has demonstrated reasonable progress toward completion of a long-term item or, "[i]f it cannot make such a finding, it shall recommend that operation be resumed at a date that it believes appropriately reflects the importance of the action involved . . . ." CLI-79-8, 10 NRC at 146 (emphasis added). Since the Board in the PID was imposing a requirement to which, at the time of imposition, Licensee could obviously not have had the opportunity to respond, the Board could not make a finding that reasonable progress had been made at the time the condition was imposed.

However, consistent with the 1979 Order, the Board could, as it did, specify that "Licensee will have demonstrated reasonable progress toward the completion of this requirement if it begins immediately to satisfy this requirement as provided in the order below." PID at 216. Licensee has unquestionably satisfied this reasonable progress criterion by the development and submission of a plan as required by the Board's Order.

The logic of the Licensing Board's determination of what constitutes "reasonable progress" toward implementation of a formal job performance evaluation plan is self-evident. The "reasonable progress" requirement was imposed to ensure that the long-term items set forth in the Commission's 1979 Order were met in a timely fashion. 1979 Order, 10 NRC at 144. The determination of whether "reasonable progress" has been made on long-term items is to be made at the time of the Licensing Board's decision, CLI-82-32, 16 NRC 1243 (1982), and "must be based on all the circumstances surrounding each individual item, including the evaluation of the requirement, any technical disagreements regarding the requirement, efforts to date, and the current implementation schedule both at TMI-1 and other similar reactors." CLI-84-7, 19 NRC 1151, 1152 (1984) (footnote omitted).

When a condition that need not be met prior to restart is imposed at the end of a proceeding, it would be unreasonable to keep the plant shut down and continue litigation of whether reasonable progress had been made at some future date. The Licensing Board's finding that reasonable progress would be made if Licensee began immediately to develop an evaluation plan was entirely appropriate.

In any event, UCS' arguments about the Licensing Board's reasonable progress determination are largely academic because Licensee has completed its plan, submitted it to the parties and the Licensing Board, and had it approved by the Board. Memorandum and Order Approving Plan for Revising Licensed-Operated Training Program, LBP-85-21, 21 NRC ___ (June 24, 1985). By any standard, we are well beyond the reasonable progress threshold -- the plan is completed, approved and being implemented. UCS' claim of Board error on the reasonable progress issue is without merit.

In sum, the Licensing Board correctly determined that the requirement it imposed on Licensee's training program was a "long-term action" and accordingly did not have to be met prior to restart; UCS has no right to litigate the adequacy of the plan; and the Board's ruling on "reasonable progress" was correct. The Licensing Board's actions with regard to the plan for evaluation of post-training job performance were proper and UCS' claims of error in this regard are unfounded.

2. The Board's Favorable Decision On Operator Attitudes Is Supported By The Record

UCS argues that the Licensing Board's favorable decision on operator attitudes is "baseless" in that it depends on the testimony of Mr. Michael Ross, the TMI-1 Manager of Operations, and on the testimony of the OARP Committee, both of whom UCS contends are not reliable. UCS Brief at 15. UCS' claims in this regard lack merit. 9/

Regarding Mr. Ross, UCS cites the Licensing Board's own observation that Mr. Ross is "hardly a disinterested observer." UCS Brief at 57,

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9/ TMIA raises similar arguments in its appeal. TMIA's concerns are treated in Section IV.B.4, infra.

citing PID at 57. What UCS ignores, however, is the fact that the Board assessed Mr. Ross' opinion testimony in light of that fact, and recognized that accordingly his opinion should be "discounted somewhat." PID at 56-57. Moreover, the Board relied not only on Mr. Ross' opinion testimony but also on his testimony on improved test performance, which the Board appropriately characterized as "objective, reasonable, and reliable," and testimony as to low attrition rates among operators which the Board found to be "objective and persuasive evidence." Id. at 56.

The Board also properly relied on the OARP Committee testimony as evidence of operator attitude. In the process of evaluating the training program, the OARP Committee inquired about the attitude operators have about their training, the cheating, and management's response to cheating. Id. at 57. UCS argues that the OARP Committee interviews of operators were unstructured and the interviewees were aware of the purpose of the interviews (UCS Brief at 20), and the Board acknowledged those criticisms were "relevant and appropriate." PID at 57. Nevertheless, it was entirely within the Board's discretion to afford "considerable weight" to the OARP Committee's observations. As the Board had ample first-hand opportunity to observe, "[t]hese seasoned professionals in their respective fields are certainly not naive." Id.

UCS also argues that the OARP Committee addressed the issue of operator attitudes in its Special Report dated June 28, 1984, [10/] at which time the Committee had not yet interviewed any operators nor was

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10/ Attachment 1 to the direct testimony of the OARP Committee, ff. Tr. 31,749.

the Committee aware of the so-called RHR Report. 11/ UCS Brief at 19. However, the Licensing Board did not rely on the conclusions reached by the OARP Committee in the Special Report in the Board's discussion of operator attitudes. 12/ UCS' assertion that there was a "virtual imperative" for the OARP Committee to support its initial conclusions on operator attitudes in its Special Report through its subsequent interviews of operators is unsupported speculation.

Finally, UCS claims that the OARP Committee testimony is unreliable because it is based on unstructured interviews "that did not meet the criteria that both UCS and the Staff agreed were necessary to determine operator attitudes." UCS Brief at 20. UCS misconstrues at least the Staff's testimony in this argument. At the hearing, the Staff witnesses testified that an appropriate methodology for a review of operator attitudes such as that undertaken by the OARP Committee should utilize operator interview questions that parallel the RHR survey questions. Staff, ff. Tr. 33,148, at 16. In this way, data from surveys such as that in the RHR Report could be used as a measure of change or consistency of operator attitudes. Id. Without structured interviews, no meaningful

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11/ In 1982, following the report of the Special Master and the Licensing Board's initial decision on the cheating episodes, Licensee commissioned a psychologists' survey of operator attitudes at TMI and Oyster Creek, because of its concern about the morale and attitudes of its employees. Tr. 32,038-39, 33,293 (Gardner). The product of the survey, the so-called RHR Report, was issued in March 1983 and introduced at the remanded hearing as UCS Exhibit 6. The RHR Report contained many references critical of management and indications of serious problems of employee attitude. PID at 51-52, ¶ 54.

12/ See PID at 50-60.

comparisons can be made between the OARP Committee's interviews and the results of the RHR Report interviews. Tr. 33,190 (Persensky). In other words, a structured interview is considered desirable for comparative purposes, and to increase the probability of obtaining reliable data. See Tr. 33,189 (Persensky). There is no Staff testimony, however, that the OARP Committee interviews of operators were otherwise so defective as to preclude any reliable determination of operator attitudes.

Moreover, despite the methodological limitations of the OARP Committee's interviews, the Licensing Board did not err in giving some weight to the Committee's findings on operator attitude, in view of the fact that the Committee was appropriately constituted and composed of highly qualified and respected professionals who are familiar with the TMI-1 training programs. See Staff, ff. Tr. 33,148, at 36.

UCS also argues the OARP Committee testimony was "tainted" with premature conclusions and the OARP Committee signaled operator interviewees that they should exhibit positive attitudes. UCS Brief at 20. UCS' argument on a possible "taint" from premature conclusions is no more than speculation unsupported by record citation, and is entitled to no weight. While the Staff testified that it would have used a method different from that employed by the OARP Committee to evaluate operator attitudes, it did not fault the OARP Committee's approach on the grounds that it tainted the OARP Committee's ultimate conclusions. See generally Staff, ff. Tr. 33,148, at 11-16, 32-33, 35-36; Tr. 33,139 (Persensky). As to any signaling of desired attitudes, while it is indeed true, as UCS points out, that Dr. Gardner agreed with the proposition of UCS' counsel

that it is "possible" that an expression to the interviewee of the fact that an interviewer's purpose is to determine attitudes might have an effect on the attitude expressed, Dr. Gardner also testified that in the case of the OARP Committee interviews he did not believe that had occurred. Tr. 33,290 (Gardner). UCS points to nothing other than its own arguments to establish that it did.

In sum, for the reasons set forth above, the Licensing Board's findings on the issue of operator attitude are adequately supported by the record and should be affirmed in all respects.

3. The Board's Reliance On The Testimony Of The OARP Committee Was Entirely Appropriate

UCS would have the Licensing Board give no weight whatsoever to the testimony of the OARP Committee. UCS Brief at 21-26. According to UCS, the fundamental flaw in the OARP Committee's testimony is that the Committee "prejudged" the adequacy of Licensee's training program before it had adequate information. Id. at 22-23. Briefly stated, UCS faults the Committee for preparing its Special Report of June 28, 1984 on the basis of interviews with management personnel and other information provided by Licensee's management. In UCS' opinion, the fact that the OARP Committee initially endorsed the training program based solely on this information "fatally taints the Committee's testimony." Id. at 25.

UCS is greatly overreaching in selectively singling out the Special Report and arguing that the OARP Committee's testimony as a whole is therefore entitled to no weight. It is true that the Special Report contained a number of methodological limitations. Staff, ff. Tr. 33,148, at 7-36. However, the Staff testified that, notwithstanding those

limitations, the shortcomings were largely remedied by work undertaken by the OARP Committee in the post-Special Report period. Id.; Tr. 33,139-46 (Persensky). Moreover, the Special Report must not be viewed in a vacuum, as UCS would do, but rather in the context of the OARP Committee's extensive efforts in preparation for the hearing.

The Licensing Board determined that it did not need to reach the question of whether the Special Report was inadequate on grounds of alleged lack of time and faulty methodology. PID at 173. The Board noted that UCS itself conceded that, having been contacted by Licensee in mid-August 1984 to prepare testimony for presentation to the Board, the OARP Committee "began to do many of the things that it should have done before it issued the Special Report." Id. Moreover, the Board correctly rejected "any idea that the Committee blinded itself to the inadequacies of the Special Report and/or that it attempted to hood-wink the Nuclear Regulatory Commission into believing that the Special Report was a thorough, exhaustive study of the issues raised in ALAB-772." Id. at 173. The Board properly viewed the Special Report in the context in which it was forthrightly presented to the Commission by the OARP Committee -- a "quick response" to some of the issues in ALAB-772, specifically prepared to contribute to an upcoming NRC meeting. Id.; see Special Report, ff. Tr. 31,749, at 3; see also id. at 82-3. In rejecting UCS' argument, the Board also noted the OARP Committee's further statement that "there was not an opportunity to undertake an in-depth study" of the type undertaken by the OARP Review Committee in 1979-80, and that whether or not it would undertake a more definitive study was a matter for GPUN to decide at a later date. PID at 173. Thus, the

the Licensing Board properly rejected any implication by UCS that the Committee was trying to pass off its Special Report as anything more than what it was -- a "quick response" to the issues in ALAB-772 in time to contribute to the Commission's expected deliberations.

UCS also claims that, because of the conclusions reached in the Special Report, which conclusions were based on information provided by Licensee management, the OARP Committee had prejudged the adequacy of Licensee's training program and the Committee's subsequent testimony thus was fatally tainted. UCS Brief at 24-25. However, if one looks at the approach taken by the OARP Committee after the submission of its Special Report, its methodological approach to the questions presented by ALAB-772 is similar to that proposed by the NRC Staff as an acceptable methodology. PID at 200, § 335. Thus, the OARP Committee did eventually do the kind of evaluation that was necessary and could properly have reached the conclusions it did based on efforts undertaken after the issuance of the Special Report. UCS supports its claim of prejudgment/taint by nothing more than its own bald statements.

The Board considered and discussed all of the OARP Committee's major findings and conclusions in the context of the Board's own analysis of Licensee's training program based on all the evidence presented. The Board correctly viewed the Committee's findings as "expert testimony to be considered along with all other evidence on the respective issues." PID at 208, ¶ 354. Moreover, the Board never reached the question of whether the OARP Committee testimony, standing alone, would have been sufficient to resolve the issues in Licensee's favor. Id. at 211-12, ¶ 361. Thus, the Licensing Board appropriately relied on the OARP

Committee findings and evaluated them in conjunction with all the other evidence in the proceeding. UCS' claim that the Licensing Board improperly gave weight to the OARP Committee testimony is without merit and should be rejected.

4. The Board Correctly Ruled that Licensee's Oral Examination Process Is Sound

UCS challenges the Board's acceptance of Licensee's oral examinations as "a final check on the written and simulator tests," and as "well structured and logically executed." PID at 132-133; UCS Brief at 26. "In essence," argues UCS, "the Board approved reliance on the unchecked and untrained judgment of those who supervise licensed reactor operators." UCS Brief at 26.

UCS' criticisms of the oral examination aspects of the licensed operator testing program were dealt with at length in the Board's PID. PID at 128-134. Indeed, the Board recognized that UCS' points have some validity, but concluded that on balance the strengths of the oral examination process outweighed the weaknesses:

> Each of UCS' points have some validity. But each point is one side of a coin which, when viewed from the other side, demonstrates very positive benefits from oral examinations. Each weakness in oral examinations has its trade-off in benefit and on balance the Board believes that the oral examination process employed by GPU Nuclear is sound.

PID at 129.

The Board saw that what was really at issue was the purpose of the oral examination, a subject which Licensee's and UCS' witnesses approached "with sharply differing premises." Id. Licensee's witness Mr. Ross testified that the oral examination affords a unique opportunity

to see if an operator truly has an understanding of the plant equipment, to probe areas of perceived weaknesses and "to really interrogate the guy and determine the level of his performance as it is applicable to the job." Tr. 33,067-68 (Ross), cited at PID at 129-30. On the other hand, UCS' witness Dr. Regan believes that oral examinations in any program have little value and they cannot be very predictive unless they are very specific and standardized, in which case some of the presumed benefits would be lost. PID at 130. It is clear that the Licensing Board views the predictive value of oral examinations as "useful" only as one of a three-part battery of tests which includes written and simulator examinations as well; "its most important use is that of a final check on the written and simulator tests." PID at 132. The Board correctly observed that the oral examination affords "the best opportunity for close communication between trainee and the test-giver" and should not be excessively standardized or objectivized to interfere with the probing inquiries by the subject-matter experts. PID at 133-34. Thus, even assuming the oral test-givers are not trained in administration of examinations, the utility of oral examinations is manifest and the Board's reliance on them in conjunction with other tests is justified.

The evidence at the remanded hearing indicates that Licensee evaluates its trainees' mastery of training in three ways: through written, oral, and simulator examinations. Newton, et al., ff. Tr. 32,409 at 7-9, 12-14, 20-25; Tr. 32,619-20 (Ross). Thus, the oral examination is one of several examination methods by which Licensee judges the effectiveness of the training program and evaluates what the operators have learned in the training program. Tr. 31,862-63 (Kelly).

In addition, each of these examination methods serves as a check on the others. Id. The oral examination is thus not the exclusive means for measuring an operator's knowledge or competence or for ascertaining the effectiveness of training. See Newton, et al., ff. Tr. 32,409, at 7-9, 12-14, 20-25.

Therefore, oral examination, even if faulty, is not the exclusive method of testing operators or evaluating training and the Licensing Board reliance on the oral examination is not fatally erroneous. The Board properly found the oral examinations to be useful, despite some deficiencies, and UCS assertions to the contrary are without merit.

In conclusion, the Board did not err in finding its requirement for formal, on-the-job evaluations of operators to be a "long-term" action; the Board's findings on operator attitudes are supported by the record; the Board correctly relied on the testimony of the OARP Committee; and the Board's approval of Licensee's oral examinations is supported by the evidence. For the reasons set forth above, UCS' appeal should be denied in all respects.

B. TMIA's Appeal

TMIA seeks reversal of the Licensing Board's decision on several grounds, both procedural and substantive. For the reasons set forth below, none of these grounds has any merit and the Licensing Board's decision should be affirmed in all respects.

1. The Board Properly Excluded TMIA's Proposed Subissue 4

TMIA now claims that the Licensing Board, prior to the start of the remanded proceeding, improperly excluded TMIA's proposed Subissue 4:

"How does the history of GPU's problems with training and its current training program reflect on the competence and integrity of GPU management." TMIA Brief at 2-5. However, when Licensee made a timely request to the Board to exclude Subissue 4, [13/] TMIA made no response of any kind to the request. TMIA should not now be permitted to complain that the request was granted.

Moreover, TMIA's complaint is without merit. The Licensing Board's decision was correct because Subissue 4 was not within the scope of the Appeal Board's remand and the issue was res judicata from earlier hearings in this proceeding. See Licensing Board Memorandum and Order of August 30, 1984, at 2. TMIA cites ALAB-772 as support for its proposition that "management competence and integrity were in issue during the remanded proceeding." TMIA Brief at 3. This reliance is misplaced, as is evident from an objective reading of the very words from ALAB-772 cited by TMIA as "support" for its claim:

> ... the proper focus of this special proceeding is on whether licensee has demonstrated its ability to operate TMI-1 in a safe and responsible manner in the future. The efficacy of action intended to remedy identified deficiencies in past conduct is a necessary element in that equation. (citation omitted).
>
> * * * *
>
> The deficiencies in operator testing, as manifested by the cheating episodes, may be symptomatic of more extensive failures in Licensee's overall training program.

ALAB-772, 19 NRC at 1232-33.

13/ See Licensee's Comments on July 13, 1984 Memorandum and Order on Lead Intervenors and Motion to Partially Exclude UCS from Participation in the Management Remand, at 6.

It is clear from this that the thrust of the Appeal Board's concern is with the training program itself, and whether past deficiencies have been remedied so as to permit Licensee to operate TMI-1 safely and responsibly in the future. TMIA made no threshold showing of the significance, if any, to the remanded hearing of "the history of GPU's problems with training" in light of the Appeal Board's remand in ALAB-772. The Appeal Board clearly remanded the issue of training in order for the Board to assess the implications of the 1980-81 cheating incidents on the adequacy of the training program in existence "now." ALAB-772, 19 NRC at 68. Questions of how past training inadequacies reflected on Licensee's integrity were addressed in the previous hearing on cheating, are beyond the scope of this remanded hearing and were properly excluded from litigation by the Licensing Board. TMIA's assertions to the contrary are unfounded.

2. TMIA's Claims of Procedural Violations Are Without Merit

TMIA argues that the Licensing Board's decision must be reversed because of various procedural and evidentiary rulings against TMIA during the remanded hearing. As explained below, none of these rulings presents any grounds for reversal of the Licensing Board's decision.

a. TMIA Was Not Improperly Prevented From Cross-Examination of Witnesses

TMIA claims that the Licensing Board used the lead intervenor concept to prevent TMIA's cross-examination of Licensee's witnesses. TMIA Brief at 5-7. As support for this claim, TMIA cites to Tr. 32,410-11, although there is no Board ruling at this reference. Rather, the

cited pages consist of an inquiry by the Board as to whether consolidation of examination with UCS was possible, and an explanation by Ms. Bradford of TMIA as to why TMIA's examination could not be consolidated with that of UCS. TMIA was then permitted to proceed with its examination. The cited reference thus is unsupportive of TMIA's charge that the Board improperly "prevented" cross-examination by TMIA.

In its Memorandum and Order on Lead Intervenors, July 13, 1984 (unpublished) (July 13 Order) the Licensing Board summarized a report to it by the intervenors on the intervenors' proposed arrangement for the assignment of lead intervenors. The Memorandum and Order stated, inter alia, the following:

> Intervenors state that, by accepting a lead intervenor arrangement, no intervenor waives its right to pursue its separate interests where the lead intervenor does not fully represent the others. This reservation is consistent with the practice followed throughout this proceeding. Intervenors are required to consult regarding their interests with the lead intervenor but they may seek leave of the Board to proceed separately if good-faith efforts to consolidate presentations fail. (emphasis added)

July 13 Order at 1-2. [14/] The exchange between Judge Smith and Ms. Bradford, cited by TMIA as support for its charge that it was "prevented" from pursuing lines of questioning, was fully consistent with the above-quoted Order and fully consistent with NRC regulations.

10 CFR § 2.714(e) of the Commission's regulations provides:

> (e) An order permitting intervention and/or directing a hearing may be conditioned on such terms as the Commission, presiding officer or the designated atomic safety and licensing board may direct in the interests of: (1)

14/ The July 13 Order provided for party comments within ten days of service. TMIA filed no comments on the Order.

> Restricting irrelevant, duplicative, or repetitive evidence and argument, (2) having common interests represented by a spokesman, and (3) retaining authority to determine priorities and control the compass of the hearing.

As set forth above, the Board's July 13 Order explicitly preserves the right of an intervenor to pursue its separate interests. While intervenors were required to consult regarding their interests with the lead intervenor, they could proceed separately on leave of the Board if good faith efforts to consolidate failed. The colloquy cited by TMIA, therefore, is fully consistent with § 2.714(e) and with the July 13 Order. See also Part 2, App. A, .III(a)(4) to the Commission's Regulations.

TMIA's other example of an instance in which it allegedly was prevented from pursuing its own separate interest is equally without merit. TMIA objects that it was foreclosed from pursuing a line of testimony that allegedly would have shown that Manager of Plant Training Newton's "unwillingness to respond to the auditing group's recommendations in the areas of providing more training personnel to perform the [on-the-job] check-outs was a persistent problem." TMIA Brief at 6-7. In the instance cited, TMIA was pursuing a line of questioning going to the substantive adequacy of the training program. Specifically, TMIA was questioning Mr. Newton on the subject of oral "check-out" for on-the-job training, a subject on which even TMIA concedes UCS had previously questioned Mr. Newton. TMIA Brief at 6; see Tr. 32,473-77. After giving TMIA the opportunity to demonstrate why counsel for UCS could not have asked questions on behalf of TMIA at the time of its own examination into the same subject matter, the Board properly sustained an objection to

TMIA's continued questioning in this area. Tr. 32,648-50. As the Board explained:

> Our sustaining of the objection is based upon the entire history of your participation on the training issue. Not just the subject matter. The failure to comply with the Order to adhere to the intervener (sic) rule and order.
>
> Your failure to participate in discovery. Your -- the bringing into the hearing new documents as to which other parties have not had a chance to discover. The bringing into the hearing of new theories as to which other parties have not had an opportunity to discover.
>
> And lack of demonstration that in these areas to which I refer, that you are making a contribution to the record.

In short, the Licensing Board terminated TMIA's inquiry not only because the subject matter was one on which TMIA did not have lead intervenor status and did not make any showing of how it could contribute to the record, but because of TMIA's continued pattern of failure to participate in discovery and the resulting surprise to the parties. Clearly, the Board's ruling in this regard was a reasonable exercise of its discretion and fully in accord with NRC regulations. TMIA has not shown that the Board's ruling was improper or that it prejudiced TMIA. The ruling thus provides no basis for reversing the PID.

b. TMIA Exhibit 1 Was Properly Rejected By the Board

TMIA complains that TMIA proposed Exhibit 1 was improperly excluded from evidence. TMIA Brief at 7-10. TMIA Exhibit 1 is an internal GPUN memorandum that documents an incident that occurred at an interface meeting held between management and operations and maintenance technicians and training crews. TMIA's complaint with regard to the handling of TMIA proposed Exhibit 1 appears to be two-fold: that the

exhibit was not accepted into evidence, and that even though TMIA was allowed limited cross-examination based on the document, this occurred "only after forcing TMIA to reveal [in front of the witnesses] the purpose intended for the document." Id. at 8. At the hearing, TMIA did not protest explaining the purpose of the document in front of the witnesses, nor did it request that the witnesses not be present for the explanation given by Ms. Bradford. See Tr. 31,979-85. This procedure (of having the witnesses leave the hearing room during such an explanation) was on another occasion requested by Ms. Bradford and acceded to by the Board. Tr. 32,667. TMIA cannot now claim Board error, having failed to alert the Board to the concerns it now expresses for the first time.

Moreover, TMIA Training Exhibit 1 was properly rejected as evidence, following TMIA's cross-examination of the OARP Committee witnesses regarding the document. The document shows that, in a meeting of approximately 50 operations, maintenance and technician training personnel and Mr. Hukill, Vice-President of GPUN and Director, TMI-1, an employee made an allegation about procedural violations directly to Mr. Hukill, and that in a subsequent interview with GPUN management the employee was told he should not have raised the allegation with Mr. Hukill but should have followed the "chain of command" to get answers. See Tr. 31,983-85 (Smith). The Board ruled that TMIA Training Exhibit 1 was "somewhat relevant" to the issue of whether there was an environment of open communication between management and employees, and permitted a limited amount of cross-examination on the document. Tr. 31,983-85. At that point, TMIA offered the document in evidence, and

the Board correctly refused to admit it on the ground that TMIA was intending to use it as part of its affirmative case and had failed to identify it before the hearing and put the other parties on notice, as provided in the Board's Memorandum and Order (Requiring Identification of Proposed Exhibits) dated October 24, 1984 (October 24 Order). Tr. 31,986. The October 24 Order is a legitimate exercise of the Board's power to regulate the course of the hearing, avoid delay, expedite the presentation of evidence and aid in the orderly disposition of the proceeding. See 10 CFR § 2.718; cf. 10 CFR § 2.752. On appeal, TMIA does not address this basic infirmity in its case and has shown no reason for overturning the Board's ruling.

In conclusion, TMIA's arguments concerning Board rulings on evidentiary and procedural matters are without merit and should be rejected.

c. The Board's Ruling Concerning TMIA's Line of Questioning on Career Advancement Was Correct

TMIA argues that it was foreclosed from pursuing a line of questioning showing that GPUN failed to provide operators the opportunity to resume their former status if they were unsuccessful in an attempt to upgrade their status. TMIA Brief at 10-11. At the hearing and on appeal, TMIA has failed to demonstrate the relevance of this line of questioning to the issues being litigated.

TMIA claims that the line of questioning was relevant to the issue of management/employee communications, citing to ALAB-772. In ALAB-772, the Appeal Board quoted from the OARP Committee's prior report in 1980: "'Top management needs to keep aware of the real and perceived problems

of its employees....'" The Appeal Board then went on to ask: "Do the post cheating changes in the training program adequately ameliorate this situation?" ALAB-772, 19 NRC at 1236. However, TMIA never demonstrates that its line of questioning shows that (1) there was a "problem" for an employee or (2) to the extent a "problem" existed, management was not aware of it. TMIA's representative, in making her profer at the hearing of what she was seeking to prove, made an argument to the effect that if a shift foreman had to maintain an SRO license in order to maintain his shift foreman status, he would be in a position where he might try to cheat to retain the license. Tr. 32,668 (Bradford). The Board correctly ruled that the situation postulated obtains for anyone who needs a license to hold his job, and that the safeguards for the examination process are based on the assumption that people will cheat if given an opportunity. Thus, the relevance of the line of questioning was at best very tenuous. Tr. 32,669-70 (Smith). Moreover, the issue of shift staffing, including the question of whether a shift supervisor would have to maintain an SRO license, had already been adjudicated. To be admitted as evidence in a proceeding, the material sought to be introduced must be relevant to the issues to be litigated, reliable, and not unduly repetitious. 10 CFR § 2.743(c). The line of questioning was properly curtailed because it would not have produced evidence that would meet this test.

d. The Licensing Board Did Not Err In Rejecting TMIA Training Exhibit 6

During TMIA's cross-examination of Dr. Long, Vice President of GPUN for Nuclear Assurance, TMIA asked that TMIA Training Exhibit 6 be

admitted into evidence. TMIA's representative asserted that the document "goes to the fact that the licensee management frequently makes statements and issues statements and does not--their actions do not correspond to their statements and that the employees perceived that to be so." Tr. 32,342-43 (Bradford). TMIA now claims that the fact that TMIA Training Exhibit 6 was not accepted into evidence precluded TMIA from questioning Dr. Long as to the weight that he attached to the comments contained in the various attachments to Exhibit 6, nor was TMIA able to pursue the "discrepancies between his assertions at the hearing that he gave scant credence to these comments, and his recommendations to Arnold concerning the relevance of" the attachments. TMIA Brief at 12-13. No explanation is offered as to why TMIA Training Exhibit 6 had to be accepted into evidence before these lines of questioning could have been pursued. Equally importantly, it is not readily apparent that TMIA attempted to pursue these lines of questioning at the hearing, and TMIA provides no record citations that would indicate that it even made such an attempt. Rejection of TMIA's Training Exhibit 6 was entirely appropriate because TMIA failed to show its relevance. Furthermore, TMIA has not shown that it was actually limited in its examination because the proffered exhibit was not admitted. TMIA's claim to the contrary should be rejected.

3. The Board's Rulings Regarding Licensee's Written Examinations and Examination Security Are Supported By The Record

a. Written Examinations

In support of its claim that the Board erred in finding Licensee's written examinations to be adequate, TMIA argues that Licensee's

witness testified that the training the operators received on once through steam generator (OTSG) procedural changes "would be reflected in the annual requalification examination." 15/ TMIA Brief at 14. TMIA's representation that Licensee's witness so testified is contradicted by a reading of the transcript itself. Mr. Leonard, Manager of Operator Training, testified that changes in training in response to changes in plant conditions would eventually be reflected in examinations and quizzes. Tr. 33,524 (Leonard). In response to additional cross-examination by TMIA on changes in procedure for the OTSG, Mr. Leonard explained that changes in the steam generator tube rupture procedures were addressed in a special training program, that the operators were examined on the changes in procedure, but that this kind of change might or might not show up on an annual examination because the annual examination is a sample of different topics taught during the year. Tr. 33,525-27 (Leonard). Indeed, when TMIA showed the witnesses a 1984 examination (UCS Exhibit 31), Mr. Ross pointed to a question on that examination that specifically reflected the training the operators had been given in changes in procedure for steam generators. Tr. 33,527 (Ross).

15/ TMIA's citation is to "Tr. 33,524 (Newton)". In fact, Mr. Newton did not testify on this issue at that page; while Mr. Leonard responded to a question at Tr. 33,524 as to whether changes in training would eventually be reflected in examinations, he did not testify that they would necessarily be reflected in the annual requalification examination.

In conclusion, TMIA's argument that the written examinations are not adequate is wholly without merit and should be rejected out-of-hand. 16/

b. Examination Security

TMIA challenges the Board's favorable findings on examination security by citing a recent NRC Inspection Report which indicates that a microfiche copy of an auxiliary operator examination was recently discovered in a parking lot at TMI. 17/ The details of this incident are

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16/ One of the Board's findings on the adequacy of the training program is that special training was given to operators in connection with changes in plant procedures for once through steam generator (OTSG) tube rupture which were "implemented in conjunction with repairs done to the OTSG at TMI-1." PID at 174. TMIA argues, in this section of its Brief, that the procedural changes were "necessitated" by the repair of the OTSG, and cites a statement in Licensee's prepared testimony that the changes were implemented "as a result of" the repairs to the OTSG. Tr. 32,409 at 33 (Newton, Leonard, Ross). TMIA Brief at 13-14. TMIA contrasts this to Mr. Ross' oral testimony in which he stated that the procedures weren't changed directly as a result of the repair, but were part of an otherwise on-going effort. Id.

The thrust and import of TMIA's argument here are wholly unclear; the argument has no apparent significance to this proceeding. The Board never found, and Mr. Ross never testified, that the plant procedure changes were "necessitated" by the OTSG repairs. Thus, it is not clear precisely what Board finding TMIA is taking issue with. But equally importantly, TMIA offers no explanation as to why it is of any import whatsoever to this proceeding whether the changes were "necessitated by" or "implemented in conjunction with" the OTSG repairs.

17/ In footnote 2 to its Brief, TMIA asserts that the NRC Staff or Licensee should have made a board notification of this incident back in April 1985. The NRC Staff considered whether the incident fit the criteria for a board notification but, after evaluating the facts surrounding the incident, determined that the incident does not warrant Board notification since the document did not fall within the definition of Category 1 examination materials subject to

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discussed in NRC Inspection Report 50-289/85-12, dated June 26, 1985, the relevant portion of which was attached to TMIA's Brief. According to TMIA, this incident contradicts the testimony of Licensee's witnesses Drs. Long and Coe, who testified at the hearing as to the security policies for Category 1 examination materials, 18/ and raises "grave questions" about Licensee's examination security system. TMIA Brief at 15-16.

An examination of the incident detailed in the Inspection Report reveals that TMIA's concerns are based on an incorrect premise -- that the discovered document was Category 1 examination material required to be secured. In fact, as set forth in the Inspection Report at 11-12, the document contained examinations and answer sheets for examinations given to auxiliary operators in April and May of 1984, which examinations have already been graded. As graded examinations, they are no longer subject to the security controls applicable to Category 1 examinations. See Long and Coe, ff. Tr. 32,202, at 19: "Security of Category 1 examinations apply (sic) from the time the questions are assembled until

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security procedures. Accordingly, since there was no breach of examination security, the incident is not relevant and material to the issue of examination security, nor is it relevant to any other issue here in controversy.

18/ Examinations at GPUN are classified into four basic security categories. Category 1 examinations, the highest level category, are comprised of written examinations where grades serve as a basis for certifying satisfactory completion of training. Long and Coe, ff. Tr. 32,202, at 19-20.

tion and grading." Thus, since the microfiche was not subject to examination security procedures, the microfiche incident does not constitute a breakdown in examination security. In turn, the incident does not undermine the Licensing Board's findings on examination security.

In summary, as concluded in the referenced Inspection Report, the incident involving microfiche records of graded examinations did not constitute a violation of Licensee's procedural requirements for the control of examinations. The incident does not undermine the Licensing Board's findings on examination security and TMIA's arguments to the contrary are without merit.

4. The Board's Conclusion That Employee Attitudes Are "Satisfactory" Is Supported By The Record

TMIA, like UCS, challenges the Board's favorable conclusions concerning operator attitudes. TMIA's arguments in many instances are virtually identical or very similar to UCS' arguments, which have been addressed in Section IV.A.2, supra. Those arguments will not be repeated here; rather, the Staff will address here only those additional arguments raised solely by TMIA.

TMIA argues that the fact that TMI operators will receive a bonus for staying at TMI until after restart is "just as likely" the cause of a low attrition rate as is improved morale. TMIA Brief at 16-17. This is the first time TMIA has raised such an argument and it should not be entertained at this late point. It is well settled that the Appeal Board need not entertain arguments raised for the first time on appeal. See, e.g., Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A,

1B and 2B), ALAB-463, 7 NRC 341, 348 (1978). Moreover, it does not negate the Board's finding that the low attrition rate is "objective and persuasive evidence" of improved morale. Indeed, attrition rate is one means the NRC Staff testified should be used as an indication of employee satisfaction, and the OARP Committee itself reviewed such rates. Staff, ff. Tr. 33,148, at 16.

In finding that operator attitudes are satisfactory today, the Board, noting the absence of a follow-up survey to the RHR Report, said "the finding is not made with the satisfaction we would prefer." PID at 59, ¶ 73. TMIA incorrectly concludes from this statement that the Board is unable to find "convincing evidence in the record" to support its finding that attitudes are satisfactory. TMIA Brief at 18. Indeed, TMIA fails to adequately articulate the precise issue it seeks to appeal in this area. The point the Board was making was that, despite the testimony of Mr. Ross and the OARP Committee, which it found to be reliable, a structured survey following up on the RHR Report "[p]erhaps would have provided better assurance" that the problem of negative operator attitudes has been resolved. PID at 59, ¶ 73. If the Board needed additional assurance before making its findings, it could have ordered that such a study be undertaken. The Board's statement at PID ¶ 73 does not support reversal of the Board's favorable finding on operator attitudes. 19/

19/ As for TMIA's claim that "[t]he Board admits that the OARP Committee did not thoroughly analyze the concerns raised by ALAB-772," TMIA

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In sum, TMIA's argument that the Board erred in finding operator attitudes satisfactory is without merit. Indeed, the record shows that operator attitudes are good. Tr. 32,562 (Ross). See also, Newton, et al., ff. Tr. 32,409, at 60-61 (Ross); Committee, ff. Tr. 31,749, at 31. The Board's findings on operator attitude are supported by an adequate record, the Board did not err in its findings and TMIA's arguments to the contrary should be rejected.

5. The Board's Favorable Findings On Management-Employee Communications Are Supported By The Record

TMIA expends considerable effort in its Brief on a section entitled "Management-Employee Communications." TMIA Brief at 26-42. TMIA claims that the Board's conclusion that the communication system between management and employees is sound and will have a beneficial effect on employee attitude and morale is "totally unsupported by record evidence," TMIA Brief at 42, and cites several alleged instances of record evidence to the contrary. This section of TMIA's Brief is particularly disjointed

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Brief at 20, the assertion is neither supported by the citation furnished by TMIA nor by the findings in the PID. On the contrary,

> The Board found that the Review Committee could have taken additional steps, but that perhaps it did more than was necessary. It all depends upon the use made of the Committee's findings and conclusions. The Committee's methodology was sufficient for the limited purpose of responding to ALAB-772.

PID at 15 (emphasis added). TMIA's claim in this regard does not support its argument that the Board's findings on operator attitudes are not supported by the record.

and it is difficult to determine the point of some of TMIA's arguments. This problem is heightened by the fact that TMIA never provides citations as to the particular Licensing Board findings with which it disagrees. Some of the points touched on by TMIA bear no discernable relationship to issues in the remanded proceeding. 20/ Other points take issue with the substance of what was communicated in specific instances, not over the adequacy of the communications process itself. 21/ To the extent that the Appeal Board in ALAB-772 raised a matter of concern about "communica-

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20/ For example, TMIA cites TMIA Exhibits 3A-M, consisting of evaluations of instructors in October 1980, as evidence that "trainees were, in fact, dissatisfied with their training and uncooperative during class." TMIA Brief at 28. Even assuming that the documents demonstrate what TMIA says they do, their relevance to any of TMIA's subissues is not apparent. To the extent that it might relate to one of TMIA's subissues, it appears to relate to TMIA's proposed Subissue 4, which was properly rejected by the Board. Memorandum and Order, August 30, 1984. See discussion at Section IV.B.1, supra.

However, TMIA's Exhibits 3A-M do not in fact support the broad proposition for which they are cited. At the remanded hearing, Licensee's witness Dr. Long testified that seven of the thirteen instructor evaluations reflected in TMIA Exhibits 3A-M concern one particular instructor, who was an outside contractor with whom the students were not happy and who was later dismissed by Licensee. Tr. 32,267 (Long). This isolated incident, involving one contractor in 1980, who was subsequently dismissed by Licensee, simply cannot form the basis for the sweeping conclusion that the trainees were dissatisfied with their training and uncooperative during class.

21/ See, e.g., TMIA Brief at 31, where TMIA objects to the stipulation entered into between Licensee and the Commonwealth regarding Licensee's employee Mr. Husted. This point is not directed at communication or lack thereof, but rather is directed at the inferences about Licensee's attitude which TMIA would have the Board draw from the fact that it entered into the stipulation, i.e., "Licensee sacrificed their (sic) employee's rights in order to remove a possible bar to the restart of TMI-1." TMIA Brief at 31. These arguments simply are not relevant to the issue of management-employee communications.

tions," its concern was over the adequacy of the process: whether post-cheating changes in the training program adequately ameliorate any lack of communication between top management, training staff and operating crews. ALAB-772, 19 NRC at 1236. TMIA's arguments are misplaced in their failure to focus on the concern noted by the Appeal Board -- adequacy of management/employee communications in the light of changes since the cheating. The Appeal Board had noted that the original OARP Committee had "suggested that there was a lack of communication between top management and the operating crews," and directed the Licensing Board to determine whether "the post-cheating changes in the training program adequately ameliorate this situation." Id.

The majority of TMIA's argument in this area relies heavily on TMIA Training Exhibits 1 and 6, neither of which was accepted into evidence in this proceeding. The contents of these documents, which were properly excluded as exhibits, cannot form the basis for reversal of the Board's decision. See discussion at Sections IV.B.2.b. and IV.B.2.d., supra.

TMIA's argument concerning "negative attitudes," which was the subject of testimony in the reopened proceeding on cheating in 1981, is equally misplaced. TMIA Brief at 29-30. Evidence of operator attitude in that time frame does not contradict the substantial amount of evidence in the record today detailing Licensee's efforts since that time to improve communications with personnel and the steps taken by License to improve the training program. See, e.g., Long and Coe, ff. Tr. 32,202, at 5-25; OARP Committee, ff. Tr. 31,749, at 22-24.

TMIA also claims that the 1979 cheating by Mr. Floyd, Supervisor of Operations at TMI-2, evidences that employees have little respect for the training process. TMIA Brief at 28-29. This incident occurred in 1979 and there is extensive record evidence that management has become more sensitive to training problems. See, e.g., Long and Coe, ff. Tr. 32,202, at 5-12.

TMIA claims that Licensee's "open door" policy and interface meetings are form without substance. TMIA Brief at 32-38. However, the rejected TMIA Exhibit 1, on which TMIA relies for this argument, shows that at such an interface meeting an employee raised directly with Mr. Hukill a serious allegation of violation of procedures. See Tr. 31,983-85 (Smith). While TMIA argues that because Licensee's response, in part, to this incident, was that the employee should follow his chain of command to get answers to his complaint, Exhibit 1 in fact demonstrates that management followed up on the employee's allegation in an attempt to determine whether corrective action was necessary. See Tr. 32,869 (Ross). Thus, TMIA's claim of form over substance is not supported by either the record evidence or rejected TMIA Exhibit 1.

At the remanded hearing, Licensee presented extensive, detailed evidence on the efforts it has made to improve communications with Licensee's operating and training personnel and to restore the integrity of the training program. Long and Coe, ff. Tr. 32,202, at 5-12. These efforts included, as the initial management response to the cheating, focusing on the "mechanics" of the examination and testing processes, and on analyzing and developing appropriate responses to these events. Id. at 5. Licensee followed up on its initial response with additional

activities, including the use of outside reviewers, to respond further to the "lessons learned" from the whole sequence of events brought out by the cheating hearings. A number of "root cause" concerns were identified and addressed, including the need to restore and maintain credibility in the training programs. at 6. Additional steps were taken to stress to instructors the impact that they can have on employee attitudes, and to identify clearly the value of the training process to all employees. Id. Mr. Hukill, Vice President of TMI-1, has taken significant steps to restore and maintain credibility in the management of the Training and Operations Department. At a minimum, he meets annually with each licensed operator, who is given the opportunity to ask questions or raise issues and problems with him. Mr. Hukill attempts to resolve, through his staff and Training personnel, any issues or questions raised by the operators. Id. at 6-8.

In addition, there is now an active program of both announced and unannounced visits to observe classroom delivery of training. 22/ Id. at 8; see also Committee, ff. Tr. 31,749, Special Report at 45. The Training Department submits the management bi-weekly "significant events" reports which highlight to the Division Director and Office of the President such things as training attendance, program initiations and completions, licensing and requalifications examination performance, and simulator training activities. Long and Coe, supra, at 9.

22/ This was imposed as a condition by the Board in LBP-82-56, 16 NRC at 384.

Moreover, during each week of requalification training, there is a one hour "management interface" meeting for operation, maintenance and technical personnel attending training. The managers presently address the status of situations in their respective areas and respond to questions from trainees in give-and-take discussions. Id. at 9; see also Tr. 33,079-80 (Newton). Yet another activity to keep management informed and in touch with operations personnel is attendance by senior managers at the simulator training sessions at the B&W facility in Lynchburg, Virginia to evaluate the quality of the training being conducted by B&W's contractor. Long and Coe, supra, at 10. In addition, there is evidence of improved and extensive brainstorming between TMI-1 operations management and personnel and training management and personnel. Id.

Finally, the OARP Committee found extensive evidence of effective communications between management and persons involved in the licensed-operator training program. Committee, ff. Tr. 31,749, at 22-24.

In sum, the Board's favorable conclusions on management/employee communications are supported throughout by ample references to the record and nothing in TMIA's Brief casts doubt on the viability of those findings. TMIA's argument to the contrary is without merit.

G. The Board's Conclusion That Licensee's Management Has Acknowledged Its Failures and Responsibility to Prevent Cheating Is Supported By The Record

TMIA claims that the oral testimony of Licensee's witness Dr. Long contradicts his written testimony to the effect that Licensee's management acknowledges its responsibility for cheating. TMIA Brief at 42-47. Once again, TMIA's argument falls wide of the mark.

TMIA cites specifically Dr. Long's written testimony that

> ... there was a belief among the training personnel based on their knowledge of operators, that everyone recognized that one is expected to do one's own work on an examination....

Long and Coe, ff. Tr. 32,202, at 3; TMIA Brief at 43, 44. TMIA then points to two instances where Dr. Long's oral testimony allegedly contradicts the above quote.

The first such instance is the fact that Dr. Long acknowledged in oral testimony that the training department and management were aware in July 1979 that an operator (Mr. W) had turned in someone else's work as his own. Tr. 32,281. This one incident does not, of itself, invalidate Dr. Long's statement. Indeed, when asked whether this fact demonstrated the inaccuracy of the quoted statement, Dr. Long explained:

> ... the V.V.O. (sic) incident was identified by the instructors. They were the ones who detected it. They reported to the management, and the -- that particular incident, I suspect, but I don't know, was not generalized into training.

Tr. 32,284 (Long).

The second such instance of alleged contradiction is the fact that in 1980 the NRC pointed out to Licensee the need for greater examination security. TMIA Brief at 44. Once again, this fact is not inconsistent with the belief that there was an expectation that everyone would do his own work.

Thus, the first incident, occurring in 1979, appears to have been an isolated one and not one from which Licensee generalized into a problem with training per se. The second incident, while illustrative of the fact that the NRC was urging greater examination security, is not inconsistent with a generally-held expectation that everyone would do his

own work. Dr. Long has testified extensively to the responsibility management has assumed for the cheating and the steps taken to correct the problems. See discussion section IV.B.5, supra. The two incidents cited by TMIA do not damage Dr. Long's credibility.

TMIA also claims that Dr. Long's written testimony that at the time of the reexamination process "operations and management training personnel should have been monitoring closely the attitudes and concerns of each individual license holder..." is inconsistent with Dr. Long's oral testimony that "we knew we had a problem from the time it [the reexamination] was announced.... And we continued to be sensitive of that and work on that...." TMIA Brief at 45. TMIA offers no explanation as to why it believes the two statements are inconsistent. In fact, the two statements are not inconsistent -- one can be "sensitive" to a problem being experienced by a group and stop short of monitoring the concerns of each individual member of that group. Dr. Long's oral testimony reflected his belief that, with the benefit of hindsight, more extensive and individualized effort was needed.

For the reasons stated above, TMIA's argument concerning the credibility of Dr. Long's testimony is not supported by the record [23/] and TMIA's claim that management has refused to acknowledge responsibility for the cheating is therefore without merit.

23/ TMIA goes so far as to accuse Dr. Long and Licensee management of materially misleading the Board with Dr. Long's testimony. TMIA Brief at 46-47. In light of the fact that, as shown above, TMIA did not even show an inconsistency in Long's testimony, such a charge must be rejected out of hand.

In conclusion, the Licensing Board did not err in excluding sub-issue 4, nor in its evidentiary and procedural rulings at the hearing; and the Board's findings that (a) Licensee's written examinations and examination security are adequate, (b) that employee attitudes are satisfactory, (c) that management/employee communications are adequate, and (d) that Licensee management has acknowledged its failures and responsibility to prevent cheating, are all supported by the record. Accordingly, TMIA's appeal should be denied in all respects.

IV. CONCLUSION

For the reasons set forth above, the appeals of intervenors UCS and TMIA are without merit and the Licensing Board's PID on the remanded issue of licensed operator training should be affirmed.

Respectfully submitted,

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Mary E. Wagner
Counsel for NRC Staff

Dated at Bethesda, Maryland
this day of August, 1985

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of)	
)	
METROPOLITAN EDISON COMPANY, ET AL.)	Docket No. 50-289
)	(Restart Remand on
(Three Mile Island Nuclear Station,)	Management - Training)
Unit No. 1)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF BRIEF IN RESPONSE TO INTERVENORS' APPEAL OF LBP-85-15" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, by deposit in the Nuclear Regulatory Commission's internal mail system, this 12th day of August, 1985:

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