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)
	)	
(Three Mile Island, Unit 1)	)	

NRC STAFF'S BRIEF IN RESPONSE TO THE EXCEPTIONS OF OTHERS TO THE ATOMIC SAFETY AND LICENSING BOARD'S PARTIAL INITIAL DECISIONS ON MANAGEMENT AND CHEATING ISSUES

Jack R. Goldberg
Counsel for NRC Staff

November 19, 1982

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I. INTRODUCTION

At the time of the accident at TMI-2 on March 28, 1979, TMI-1 was being returned to full power operation after having been refueled. When the accident at TMI-2 occurred, the Licensee immediately shut down TMI-1. On July 2, 1979 the Commission issued an immediately effective order directing that TMI-1 remain shutdown until further order of the Commission itself and announcing that it had determined that it was in the public interest that a hearing precede restart of the facility.

On August 9, 1979 the Commission issued an Order and Notice of Hearing in which it ordered a hearing and established a Licensing Board to rule on petitions to intervene, to conduct the hearing, to render an initial decision, and upon issuance of a decision, to certify the record to the Commission itself for final decision. CLI-79-8, 10 NRC 141 (1979). The Commission included in CLI-79-8 guidelines for the conduct of the hearing and lists of short-term and long-term actions recommended by the Director of Nuclear Reactor Regulation to be required of the Licensee to resolve the concerns discussed by the Commission in its

Order. 10 NRC 144-45. The Commission directed that the subjects considered at the hearing include whether the "short-term actions" are necessary and sufficient to assure that TMI-1 can be operated safely and should be required before restart is permitted, and whether the "long-term actions" are necessary and sufficient to assure that TMI-1 can be operated safely for the long term and should be required as soon as practicable. 10 NRC 148.

On August 20, 1981 the Commission modified that portion of its Order of August 9, 1979 which provided that the record be certified by the Licensing Board directly to the Commission for final decision to provide instead that an Atomic Safety and Licensing Appeal Board be established to hear initial appeals in this proceeding. The Commission emphasized that it would decide whether any Licensing Board decision favorable to restart should be effective during the pendency of any appeals. CLI-81-19, 14 NRC 304 (1981).

On December 23, 1981, the Commission issued another order in which it stated that:

> [t]he Commission is the exclusive administrative body with the power to determine whether Unit One may restart during the pendency of any possible appeals of a Board decision before the Atomic Safety and Licensing Appeal Board. Parties may not file papers with the Appeal Board either supporting or opposing a stay of any such decision during the pendency of any such appeals.

CLI-81-34, 14 NRC 1097, 1098 (1981). The Commission indicated that it had decided against Appeal Board stay authority because in this proceeding:

> a decision by the Commission rather than granting effectiveness to a Licensing Board decision, would be determining, based on that decision and other factors, whether the concerns which prompted its original immediate suspension order of August, 1979, justify a continuation of that suspension. If they do not, and the Commission therefore can no longer find that the "public health, safety and interest" mandates the suspension, then the Commission is required by law -- whatever the nature of the Licensing Board's decision -- to lift that suspension immediately. This is a matter peculiarly within the Commission's knowledge and involving the most discretionary aspects of its enforcement authority.

Id.

The Licensing Board issued its Partial Initial Decision on Management Issues (Management PID)[1/] on August 27, 1981, but retained jurisdiction over certain issues relating to the quality of Licensee's management and its operating personnel because of allegations of cheating on the NRC operator licensing examinations which had been administered at TMI-1 in April 1981. On September 14, 1981, the Licensing Board reopened the record on management issues to inquire into the allegations of cheating. The Licensing Board issued its Partial Initial Decision in the reopened proceeding on cheating (Cheating PID) on July 27, 1982.[2/] Exceptions to the Licensing Board's Management PID were filed and briefed by Intervenors TMIA and the Aamodts, and exceptions to the Licensing

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1/ LBP-81-32, 14 NRC 381 (1981).

2/ The Management and Cheating PIDs, along with the Licensing Board's December 14, 1981 Partial Initial Decision on Plant Design and Procedures, Separation, and Emergency Planning Issues, LBP-81-59, 14 NRC 1211 (1981), comprise the Licensing Board's entire initial decision in the TMI-1 restart proceeding.

Board's Cheating PID were filed and briefed by the Commonwealth of Pennsylvania and Intervenors TMIA, the Aamodts, and UCS.[3/]

In an Order dated August 6, 1982, the Appeal Board directed that responses to briefs filed in support of exceptions by other parties be filed in a single, consolidated reply brief. The Licensee filed a reply brief on November 15, 1982.[4/] The Staff hereby replies to the briefs in support of exceptions on management and cheating issues which were filed by the Commonweath of Pennsylvania and Intervenors TMIA, the Aamodts, and UCS.

II. STATEMENT OF THE CASE ON MANAGEMENT AND CHEATING ISSUES

In its Order and Notice of Hearing dated August 9, 1979 (CLI-79-8, 10 NRC 141) the Commission identified certain actions that had been recommended by the Director of the Office of Nuclear Reactor Regulaton (NRR) to be required of the Licensee to resolve certain safety concerns related to Licensee's managerial capability and resources and reactor operator training. Those safety concerns had been identified by the NRC

3/ See Commonwealth of Pennsylvania's Brief in Support of Exceptions to the Atomic Safety and Licensing Board Partial Initial Decision Dated July 27, 1982 (Reopened Proceeding - Operator Cheating), September 30, 1982; TMIA's Brief in Support of Exceptions to Partial Initial Decisions of August 27, 1981 and July 27, 1982 - Management Issues and Reopened Proceeding, September 30, 1982; Aamodt Brief of Exceptions Taken to August 27, 1981, July 27, 1982 Partial Initial Decisions (Management Issues/Training/Integrity), September 30, 1982; Union of Concerned Scientist Brief on Exceptions to Partial Initial Decision (Reopened Proceeding), September 30, 1982.

4/ See Licensee's Brief in Opposition to Appellants' Briefs on Exceptions Related to Management Capability, November 15, 1982.

Staff in a reevaluation of B&W reactors undertaken immediately following the accident at TMI-2. In the view of the Director of NRR, completion by the Licensee of certain short-term actions[5/] would permit a finding of reasonable assurance that TMI-1 could safely resume operation, and completion by the Licensee of certain long-term actions[6/] would permit a finding of reasonable assurance of the safety of long-term operations of TMI-1.[7/]

The Commission directed the Licensing Board established by it to conduct the hearing in the TMI-1 Restart Proceeding to include among the subjects considered:[8/]

> (1) Whether the "short term actions" recommended by the Director of Nuclear Reactor Regulation. . . are necessary and sufficient to provide reasonable assurance that the Three Mile Island Unit 1 facility can be operated without endangering the health and safety of the public, and should be required before resumption of operation should be permitted.
>
> (2) Whether the "long-term actions" recommmended by the Director of Nuclear Reactor Regulation . . . 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.

5/ Short-term actions 1e and 6 address safety concerns related to managerial capability and resources and reactor operator training. CLI-79-8, 10 NRC 144-45.

6/ Long-term action 3 includes an item related to managerial capability and resources. CLI-79-8, 10 NRC 145. See Item 2.2.1.b. in Table B-1 of NUREG-0578.

7/ CLI-79-8, 10 NRC 144-45.

8/ CLI-79-8, 10 NRC 148.

In a March 6, 1980 Order, the Commission provided further guidance regarding the management competence issues by directing the Licensing Board to examine 13 specific issues. See CLI-80-5, 11 NRC 408 (1980). Those specific issues are the subject of the Licensing Board's August 27, 1981 Management PID.

Prior to the issuance of the Licensing Board's Management PID, the NRC Staff notified the Licensing Board of the results of an investigation by the Staff into allegations of cheating by two TMI-1 shift supervisors on the NRC's April, 1981 Senior Reactor Operator written examination. The Licensing Board issued its Mangement PID but noted therein that the Staff's investigation into cheating at TMI-1 raised questions affecting the issues decided in that PID. The Licensing Board, therefore, retained jurisdiction to consider the effect of the cheating investigation on its Management PID.

On September 14, 1981, the Licensing Board reopened the TMI-1 restart proceeding to inquire into the cheating matter and appointed Administrative Judge Gary L. Milhollin as Special Master to preside over an evidentiary hearing. Memorandum and Order Reopening Record on Matters Related to Cheating, Appointing a Special Assistant, and Scheduling a Conference of the Parties, September 14, 1981. Following a conference of the parties, the Licensing Board adopted as the broad issue to be considered in the reopened proceeding:

> the effect of the information on cheating in the NRC April examination on the management issues considered or left open in the Partial Initial Decision, recognizing that, depending on the facts, the possible nexus of the cheating incident in the NRC examination goes beyond the cheating by two particular

> individuals and may involve the issues of Licensee's management integrity, the quality of its operating personnel, its ability to staff the facility adequately, its training and testing program, and the NRC process by which the operators would be tested and licensed.

Memorandum and Order on October 2, 1981 Conference of the Parties Relative to Reopened Proceeding, October 14, 1981, at 2. In addition, the Licensing Board specified 12 specific issues to be addressed at the hearing. Id. at 2-4.

Following an evidentiary hearing and the submission of proposed findings of fact and conclusions of law by the parties,[9/] the Special Master issued his Report of the Special Master on April 28, 1982. After considering the parties' comments and reply comments on the Special Master's Report, as well as comments and reply comments by UCS and various individuals who were the subject of certain findings and conclusions by the Special Master, the Licensing Board issued its Partial Initial Decision (Reopened Proceeding) on July 27, 1982 (Cheating PID). Therein, the Licensing Board resolved the cheating issues in favor of restarting TMI-1 and reaffirmed its conclusions favoring restart which were set forth in its earlier Management PID and Plant Design and Procedures, Separation and Emergency Planning PID. July 27, 1982 Cheating PID, ¶¶ 2089, 2423. More specifically, the Licensing Board concluded that, based on its findings, recommendations

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9/ The parties to the reopened proceeding were the Licensee, the Commonwealth of Pennsylvania, Intervenors Three Mile Island Alert (TMIA) and Mr. & Mrs. Aamodt (Aamodts), and the NRC Staff.

and conditions, the cheating issues in the reopened proceeding "have been resolved in favor of restarting Three Mile Island Unit 1 and that the conclusions of the Partial Initial Decisions of August 27, 1981, 14 NRC 381, and December 14, 1981, 14 NRC 1211, remain in effect." July 27, 1982 Cheating PID ¶ 2423.

Exceptions to the Licensing Board's August 27, 1981 Management PID were filed and briefed by Intervenors TMIA and the Aamodts. Exceptions to the Licensing Board's July 27, 1982 Cheating PID were filed and briefed by the Commonwealth of Pennsylvania and Intervenors TMIA, the Aamodts, and UCS. Briefly, the Commonwealth takes exception to the Licensing Board's permitting Licensee to continue to use certain individuals in the operation of TMI-1 or for the instruction of other operators and to the Licensing Board's failure to require Licensee's training instructors to meet new qualifications criteria prior to restart. Intervenors TMIA and the Aamodts challenge a number of the Licensing Board's evidentiary and procedural rulings in both the management phase of the proceeding and the reopened proceeding on cheating and support the Special Master's findings on cheating rather than those of the Licensing Board. UCS claims that the Licensing Board erred by failing to reverse or modify its findings and conclusions on plant design issues in light of the cheating incidents.

III. STATEMENT OF ISSUES PRESENTED

A. The Management PID

The issues presented by the appeals on the Management PID are:

1. Whether the Licensing Board erred by failing to correct an alleged imbalance of resources between TMIA and its opposing parties.

2. Whether the Licensing Board improperly prevented TMIA from developing the record on TMIA Contention 5.

3. Whether the Licensing Board failed to resolve issues to provide reasonable assurance that Licensee's management is capable of safely operating TMI-1.

4. Whether the Licensing Board misinterpreted or failed to enforce the Commission's August 9, 1979 Order (CLI-79-8) Item 1(e) concerning simulator training of operators.

5. Whether the Licensing Board erred by failing to impose stricter staffing conditions than it did.

6. Whether the Licensing Board erred in striking Aamodts' testimony concerning "fatigue" of operators.

B. The Cheating PID

The issues presented by the appeals on the Cheating PID are:

1. Whether the Licensing Board erred by reversing findings by the Special Master which were based on witnesses' credibility or demeanor.

2. Whether the Licensing Board erred in its findings and conclusions regarding the adequacy of the Staff's investigation of cheating.

3. Whether the Licensing Board erred in its findings and conclusions regarding the content of NRC licensing examinations.

4. Whether the Licensing Board erred by failing to reverse or modify its findings and conclusions on plant design issues.

5. Whether the Licensing Board erred in its treatment of the allegations against Mr. Ross.

6. Whether the Licensing Board erred by relying on Mr. MM's comments on the Special Master's Report.

7. Whether the Licensing Board erred by upholding the Special Master's rejection of the testimony of Mr. Harry Williams.

8. Whether the Licensing Board abused its discretion by permitting Licensee to use Messrs. G and H to operate TMI-1 and Mr. Husted to instruct other operators.

9. Whether the Licensing Board erred by not requiring Licensee's training instructors to meet the new qualifications criteria prior to restart.

IV. ARGUMENT

A. The Management PID

1. The Licensing Board Did Not Err by Failing to Correct the Alleged Imbalance of Resources between TMIA and its Opposing Parties

TMIA states that its effective participation in the managment phase of the restart proceeding was "hampered" because of a wide imbalance of resources between TMIA, on the one hand, and Licensee and the Staff, on the other hand. TMIA Brief at 3. TMIA argues, without support, that the Licensing Board violated TMIA's due process rights by not correcting this asserted imbalance. Id. at 2-4. There is no established right for any party to have its resources balanced with those of other parties to the proceeding and the Licensing Board did not err in failing to provide TMIA with the assistance it claims it was due.

TMIA cites no authority, and the Staff knows of none, for its assertion that "due process" requires its resources to be balanced with those of other parties to the proceeding. As a general matter, according to the so-called "American Rule," parties to civil judicial and administrative proceedings must rely on their own financial resources to satisfy the expense of their litigation and may not require the financial assistance of others. See Pacific Gas and Electric Company (Stanislaus Nuclear Project, Unit 1), ALAB-550, 9 NRC 683, 699 (1979).

With respect to the issue of a "resource imbalance" in general, the Commission has stated that:

> the fact that a party may have personal or other obligations or possess fewer resources than others to devote to the proceeding does not relieve that party of its hearing obligations.

Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 454 (1981). Thus, as a general rule, the Commission intends each party to meet its obligations with its own resources.

With respect to this proceeding in particular, the Commission specifically prohibited the Licensing Board and the Staff from providing financial assistance to intervenors. On May 16, 1980, the Commission ruled that it would not provide financial assistance to intervenors in this proceeding because Congress precluded the use of Fiscal Year 1980 funds to assist intervenors in NRC proceedings. Memorandum and Order, CLI-80-19, 11 NRC 700 (1980). Similarly, on December 4, 1980, the Commission, citing an opinion of the Comptroller General of the United States (Opinion No. B-200585 (December 3, 1980)), ruled that Fiscal Year 1981 fundings may not lawfully be used by the NRC in its procedural assistance program. The Commission therefore directed the Licensing Board and the Staff to immediately cease such assistance. Memorandum, December 4, 1980. Thus, to the extent that TMIA claims that the Licensing Board erred by not providing TMIA with financial assistance, TMIA's argument is without merit since the Commission, specifically including both the Licensing Board and the Staff, did not have the statutory authority to provide such financial assistance to TMIA.

With respect to TMIA's assertion that the Licensing Board erred by not providing TMIA with technical assistance (appointment of an independent expert or Staff assistance) (see TMIA Brief at 3-4), there also is no basis to find that the Licensing Board erred, since such action by the Licensing

Board would constitute an indirect funding of intervenors prohibited by the Commission's Fiscal Year 1980 and 1981 appropriations acts.[10/] Indeed, the subject of CLI-80-19, supra, was a specific request for the funding of expert witnesses to be called by intervenors, which the Commission denied. In light of that ruling and the Commission's explicit direction that the Licensing Board and the Staff immediately cease procedural assistance to intervenors, it is clear that the Licensing Board lacked the authority to assist TMIA as it requested.[11/] Accordingly, the Licensing Board cannot be found to have erred in failing to provide more assistance to TMIA.

2. The Licensing Board Did Not Improperly Prevent TMIA from Developing the Record on TMIA Contention 5

TMIA claims that proper development of the record on TMIA Contention 5[12/] was impossible due to TMIA's lack of resources and the Licensing Board's arbitrary rulings. See generally TMIA Brief at 3-18. More specifically, TMIA asserts that the Licensing Board prevented TMIA from properly developing the record on TMIA Contention 5 in the following respects:

(a) "The Board violated due process in not appointing an independent expert to assist TMIA in the development and presentation of TMIA 5, or making the Staff available for technical assistance...." TMIA Brief at 3.

10/ See Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-382, 5 NRC 603, 608 (1977), wherein the Appeal Board stated its belief that the provision of indirect financial assistance to intervenors was prohibited by Commission policy.

11/ Note that the Licensing Board exercised its authority to assist intervenors to the fullest extent it believed possible by establishing a hearing room library of transcripts for intervenors. See PID ¶ 33.

12/ TMIA Contention 5, quoted in full the Management PID at ¶ 277, concerns TMIA's allegation that the Licensee deferred safety-related maintenance and repair beyond the point established by its own procedures and disregarded the importance of safety-related maintenance in safely operating a nuclear plant.

(b) The Board "ordered TMIA to present an affirmative case on TMIA Contention 5 first, before Licensee's testimony was presented, and before the Staff's SER was even issued." Id. at 4 (emphasis in original).

(c) "[T]he Board imputed [Ms. Bradford] with total knowledge of what had transpired in months of hearing before she became involved." Id. at 7.

No error by the Licensing Board can be founded on any of these assertions. Before addressing these specific assertions, however, it is important to correct the impression that TMIA has created that the record on TMIA Contention 5 was not fully developed.

TMIA itself called fifteen witnesses to testify on TMIA Contention 5. Management PID ¶ 279. Another witness, a licensee employee, testified at the request of the Licensing Board. Tr. 4017-19. The Licensee presented a panel of five witnesses (Shovlin, et al., ff. Tr. 13,533) and an individual witness (Manganaro, ff. Tr. 13,643) on the subject of TMIA Contention 5, and the Staff presented two witnesses (Keimig and Haverkamp, ff. Tr. 16,412). In addition, during the course of TMIA's presentation of its case on TMIA Contention 5, the Licensing Board requested the Licensee to submit further written testimony addressing TMIA's concerns. Tr. 3352-58. In response, "Licensee's Response to Board Question Concerning Maintenance Practices in the Sample Year, 1978" was admitted into evidence as Licensee Ex. 29. Significantly, TMIA chose not to cross-examine Licensee's witnesses on Licensee Ex. 29 Tr. 13,659-61. Nor did TMIA cross-examine the Staff's witnesses on their prefiled testimony on TMIA Contention 5. Tr. 16,408-09, 16,411-12. Thus although TMIA may have done less than it could have to develop the record on its own Contention 5, the Licensee, the Staff, and the Licensing Board fully developed the record on TMIA's Contention 5.

We now address TMIA's specific assertions of how, in TMIA's opinion, the Licensing Board prevented the "proper development of the record on TMIA Contention 5." TMIA Brief at 3.

(a) The Licensing Board Did Not Err by Not Providing Independent or Staff Technical Assistance to TMIA

As discussed above (Section IV.A.1.) in connection with TMIA's general claim that the Licensing Board erred by not correcting the alleged imbalance of resources between TMIA and its opposing parties, TMIA has no right to be provided with litigative resources which are equal to or comparable with those of its opposing parties. For the reasons set forth above, the Licensing Board was prohibited by law from directly or indirectly providing financial assistance to intervenors. This prohibition would appear to encompass providing TMIA with technical assistance for the development and presentation of its case. See generally Midland (ALAB-382), supra note 10, 5 NRC at 607-08. TMIA's asserted error on this ground is therefore without merit.

(b) The Licensing Board Did Not Err by Directing TMIA to Proceed First with Its Affirmative Case on TMIA Contention 5

As the Licensing Board explained, TMIA repeatedly failed to respond fully to Licensee's interrogatories on TMIA Contention 5 and failed to comply with the Licensing Board's orders granting Licensee's motions to compel TMIA to respond. Management PID ¶ 278. TMIA did not take exception to those Orders and does not now claim the Licensing Board erred in granting Licensee's motions to compel. The Licensing Board believed that TMIA's default would have justified the Board in dismissing

TMIA Contention 5, but, because of the importance of the contention, the Board elected to receive evidence on it. Id. at ¶ 278, n.26. The Board did, however, direct TMIA to proceed first with its evidence in order to allow the Licensee to discover the specific bases of Contention 5 which TMIA refused to properly provide Licensee during discovery.[13/] Id. at ¶ 278. Under these circumstances, there can be no serious question that the Licensing Board was both authorized and justified in directing TMIA to present its case first. Section 2.707 of the Commisison's Rules of Practice provides, in pertinent part, that, on failure of a party to comply with a discovery order, the Licensing Board

> may make such orders in regard to the failure as are just, including, among others, the following:
>
> (a) Without further notice, find the facts as to the matters regarding which the order was made in accordance with the claim of the party obtaining the order, and enter such order as may be appropriate; or
>
> (b) Proceed without further notice to take proof on the issues specified.

13/ The Appeal Board has approved a licensing board's taking measures to preserve applicants' right to discover the bases for intervenors' contentions:

> The Applicants in particular carry an unrelieved burden of proof in Commission proceedings. Unless they can effectively inquire into the position of the intervenors, discharging that burden may be impossible. To permit a party to make skeletal contentions, keep the bases for them secret, then require its adversaries to meet any conceivable thrust at hearing would be patently unfair, and inconsistent with a sound record.

Northern States Power Company (Tyrone Energy Park, Unit 1), LBP-77-37, 5 NRC 1298, 1300-01 (1977) (citations omitted), quoted with approval in Pennsylvania Power and Light Company (Susquehanna Steam Electric Station, Units 1 and 2), ALAB-613, 12 NRC 317, 338 (1980).

10 CFR § 2.707. See also 10 CFR § 2.718(e),(m). Thus the Licensing Board would have been justified in summarily resolving TMIA Contention 5 in Licensee's favor. Similarly, but as a less severe sanction, the Licensing Board could have denied TMIA the right to offer any evidence on that issue. Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 454 (1981). It follows a fortiori that the Licensing Board could proceed to hear evidence on TMIA Contention 5 in the order in which it specified. As stated in 10 CFR Part 2, Appendix A, § V(d)(4): "The order of presenting testimony may be freely varied in the conduct of the hearing." Similarly, the Appeal Board has held that "[r]esponsibility for the conduct of the hearings, including the order of presentation of evidence and the scheduling of witnesses, is committed by law and regulation to the officers presiding at the trial." Public Service Company of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-459, 7 NRC 179, 188 (1978) (emphasis added), citing 5 U.S.C. § 556(c) and 10 CFR § 2.718. In the circumstance of TMIA's refusal to comply with Licensing Board orders directing TMIA to respond to Licensee's discovery on Contention 5, the Board's action in requiring TMIA to proceed first on TMIA Contention 5 was a reasonable sanction well within the Board's discretion. TMIA cannot now be heard to complain since the sanction imposed on it was strictly of its own making.

Furthermore, contrary to TMIA's claim, there is no due process violation associated with the Licensing Board's direction that TMIA proceed first with evidence on Contention 5. The only argument advanced by TMIA to support such a claim is that "[t]his procedure was extraordinarily unfair and violated the fundamental Atomic Energy Act

rule that the burden of proof in NRC licensing proceedings... rests solely on the Licensee."[14/] TMIA Brief at 4. Clearly, TMIA has confused the burden of proof with the order of presentation of evidence. Briefly, the party with the burden of proof, otherwise known as the "risk of nonpersuasion," bears the risk of failing to persuade the fact-finder with the requisite weight of the evidence[15/] (usually a preponderence in civil and administrative proceedings.)[16/] In the circumstances of this case, then, the Licensing Board simply required TMIA to present its evidence on TMIA Contention 5 first, but did not shift to TMIA the burden of proof on TMIA Contention 5. That burden remained with Licensee. As explained above, TMIA's repeated and flagrant failures to comply with the Licensing Board's discovery orders fully justified the Licensing Board's directing TMIA to present its evidence on TMIA Contention 5 first.

(c) The Licensing Board Did Not Err by Imputing to Ms. Bradford Knowledge of the Proceeding before She Became Involved

TMIA explains in its brief that after TMIA presented its affirmative case on TMIA Contention 5, but before Licensee presented its rebuttal testimony, TMIA's counsel withdrew from the case due to TMIA's inability to continue to finance counsel. As a result, Ms. Louis Bradford, a

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14/ 10 CFR § 2.732 provides:

> Unless otherwise ordered by the presiding officer, the applicant or the proponent of an order has the burden of proof.

15/ 9 Wigmore, Evidence § 2485.

16/ A related but different concept is the burden of going forward; the party with the burden of going forward bears the risk of failing to introduce any evidence on the issue in question. James, Civil Procedure § 7.5 (1965).

volunteer member of TMIA, began representing TMIA in the proceeding. TMIA Brief at 7. TMIA states that the Licensing Board "imputed [Ms. Bradford] with total knowledge of what had transpired in months of hearings before she became involved" and claims that in doing so, the Licensing Board violated TMIA's due process rights. Id.[17/] This claim is without merit.

The record shows that TMIA presented its entire case-in-chief on TMIA Contention 5 while represented by its counsel. See Tr. 2491 et seq.; see also Tr. 10,421-22. Before Licensee presented its rebuttal testimony, however, TMIA's counsel withdrew and Ms. Louise Bradford, a member of TMIA, began representing TMIA. At a January 15, 1981 discussion of the scheduling of Licensee's rebuttal testimony on TMIA Contention 5, the Licensing Board indicated that TMIA would have "lead time" (of approximately one month) for its preparation for Licensee's rebuttal testimony. Tr. 10,422. When asked by Chairman Smith whether TMIA would be present or represented by someone "who is prepared to address the issue when the testimony is presented," Ms. Bradford replied, "That is correct." Tr. 10,423. Chairman Smith then explained to Ms. Bradford that knowledge of what had happened in the proceeding prior to her appearance would be imputed to her and that it was TMIA's counsel's

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17/ TMIA further asserts in its Exception 82 (quoted in TMIA's Brief at 7) that the Licensing Board also violated its due process rights "in not communicating certain essential information to [Ms. Bradford]." TMIA does not identify the "essential information" the Board allegedly failed to communicate to Ms. Bradford. Indeed, TMIA's brief does not address this point at all. This aspect of TMIA's Exception 82 is therefore waived. See Wisconsin Electric Power Company (Point Beach Nuclear Plant, Unit 1), ALAB-696 (October 1, 1982), slip. op. at 13-14, and the cases cited therein. See also 10 CFR § 2.762(a) and 10 CFR Part 2, Appendix A, § IX(d)(2).

responsibility, notwithstanding his withdrawal, to bring Ms. Bradford up to date on what had been done in the proceeding. Tr. 10,431-32. Chairman Smith also stated that the Licensing Board would try to be helpful to her whenever possible. Tr. 10,432. Furthermore, the Licensing Board excused TMIA of its responsibility, to which its counsel had obligated it, to act as "lead counsel" for the intervenors on the management issues. Tr. 10,431, 10,441-42.

As can be seen from the record, TMIA raised no objection at the hearing to the Licensing Board's imputing to Ms. Bradford knowledge of the proceeding. Nor did TMIA ever request that the Licensing Board give TMIA additional time to prepare for futher testimony on its Contention 5 due to the withdrawal of its counsel. In fact, Ms. Bradford indicated that TMIA would be prepared for Licensee's rebuttal testimony on TMIA Contention 5. TMIA, therefore, should not be heard to complain now, for the first time, that the Licensing Board erred by imputing knowledge of the proceeding to Ms. Bradford. Since this matter was raised for the first time on appeal and does not involve a serious substantive matter, it should not be entertained by the Appeal Board. See Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B and 2B), ALAB-463, 7 NRC 341, 348 (1978); Florida Power and Light Company (St. Lucie Nuclear Power Plant, Unit 2), ALAB-335, 3 NRC 830, 842 n.26 (1976); Maine Yankee Atomic Power Company (Main Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1021 (1973).

In addition, TMIA, as a party to the restart proceeding, should properly be charged with knowledge of the proceeding as all parties properly are so charged. TMIA cannot use its asserted scarcity of resources to excuse it from those obligations which all parties to NRC proceedings bear. See Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 454 (1981). It follows that TMIA, the party, as an appellant, cannot legitimately claim that it was error for the Licensing Board to impute to TMIA or its members, including Ms. Bradford, knowledge of the proceeding. The situation presented here should, therefore, be distinguished from cases where a party's counsel withdraws and the party obtains another counsel who was theretofore not involved in the proceeding and for whom there is no basis to impute knowledge of the proceeding to him or her.

For these reasons, TMIA's claim that the Licensing Board erred by imputing to Ms. Bradford knowledge of the proceeding should be rejected.

3. The Licensing Board Did Not Fail to Resolve Issues to Provide Reasonable Assurance that Licensee's Management is Capable of Safely Operating TMI-1

On March 6, 1980, the Commission issued an Order providing the Licensing Board with guidance regarding the management competence issues by directing the Licensing Board to examine 13 specific issues. See CLI-80-5, 11 NRC 408 (1980). TMIA argues in its brief that the Licensing Board did not resolve three of those issues (Issues (1), (6) and (10))[18/] to provide reasonable assurance that Licensee's management is capable of safely operating TMI-1. TMIA Brief at 18-29.

As the Management PID demonstrates, Issues (1), (6) and (10) were resolved by the Licensing Board in a manner favorable to the restart of TMI-1. Issue (1) is addressed by the Board in the Management PID at ¶¶ 46-67. As stated by the Board:

18/ The three issues cited by TMIA are as follows:

(1) Whether Metropolitan Edison's command and administrative structure, at both the plant and corporate levels, is appropriately organized to assure safe operation of Unit 1;

(6) whether the relationship between Metropolitan Edison's corporate finance and technical departments is such as to prevent financial considerations from having an improper impact upon technical decisions;

(10) whether the actions of Metropolitan Edison's corporate or plant management (or any part or individual member thereof) in connection with the accident at Unit 2 reveal deficiencies in the corporate or plant management that must be corrected before Unit 1 can be operated safely.

CLI-80-5, 11 NRC 408-09.

> "The Licensing Board concludes that the Licensee's command and administrative structure at the corporate level is appropriately organized to provide reasonable assurance of safe operation of TMI-1."

Id. at ¶ 67. Issue (6) is addressed at PID ¶¶ 387-401. The Licensing Board concluded:

> that Licensee's organizational framework and its practice of committing substantial resources to its nuclear business provides reasonable assurance that the relationship between its corporate finance and technical departments is such as to prevent financial considerations from having an improper impact upon technical decisions.

Id. at ¶ 401. Finally, Issue (10) is addressed at PID ¶¶ 461-506. The Board, after noting its lack of knowledge about a Department of Justice investigation regarding possible falsification of Reactor Coolant System leak rate test data for TMI-2, summarized its findings on Issue (10) as follows:

> We find no deficiencies in the corporate or plant management, arising from our inquiry into management's response to the accident, that have not been corrected and which must be corrected before there is reasonable assurance that Unit 1 can be operated safely.

Id. at ¶ 506.

Thus, on its face, the Management PID demonstrates that the Licensing Board resolved CLI-80-5 Issues (1), (6) and (10) to provide reasonable assurance that Licensee's management is capable of safely operating TMI-1. TMIA's argument, however, is that the Licensing Board committed various errors in resolving Issues (1), (6) and (10) in a manner favorable to restart. See TMIA Brief at 18-29. Among these asserted errors are the following:

(a) "The Board's statement in ¶ 64 that [Staff witnesses] Messrs. Crocker and Allenspach have expertise to evaluate the management and command structure of a nuclear utility

is contrary to the evidence." TMIA Exception 5, quoted in TMIA's Brief at 19.

(b) "The Board erred in not accepting into evidence TMIA Exhibits 49 and 50, as described in [PID] ¶ 469, and rejecting TMIA's Motion to Reopen the Record on July 9, 1981," and "erred in footnote 47, ¶ 490, in not requesting witnesses on its own to pursue the conclusion of the Udall report." TMIA Exceptions 62 and 70, quoted in TMIA's Brief at 24.

(c) "The Board in ¶ 490-497 was derelict in its duty to resolve Board Issue 10 by not thoroughly investigating Herbein's role in the communication failures during the accident, and how this reflects on his current qualifications, and errs in blaming intervenors for not litigating or questioning on the issue" and "[t]he Board's conclusions in ¶ 493 that the public's health and safety would not be adversely affected by failing to conduct its own investigation into Herbein's role in information disclosure, is arbitrary and capricious and an abuse of discretion." TMIA Exceptions 10 and 72, quoted in TMIA's Brief at 27.

(d) "The Board erred in ¶ 501 in not pursuing the issues of whether Mr. Herman Dieckamp made one or more false statements in his mailgram to Congressman Udall and its conclusions that Dieckamp believed the statement to be true when made is contrary to the evidence." TMIA Exception 77, quoted in TMIA's Brief at 29.

For the reasons which follow, none of these exceptions has merit.

(a) The Licensing Board Did Not Err by Finding that Staff Witnesses Crocker and Allenspach Have Expertise to Evaluate the Management and Command Structure of a Nuclear Utility

TMIA argues that each witness who endorsed Licensee's management structure (CLI-80-5 Issue (1)) lacked expertise, objectivity, or credibility. TMIA Brief at 19. In particular, TMIA faults the Licensing Board for relying on NRC Staff witnesses Crocker and Allenspach because they did not have any specific management training. TMIA Brief at 19. Both Messrs. Crocker and Allenspach, however, have had extensive experience evaluating nuclear utility management organizations, and on that basis are eminently qualified to present expert testimony on Licensee's mange-

ment structure. See Fed. R. Evid. 702 (a witness can be "qualified as an expert by knowledge, skill, experience, training or education" (emphasis added)); Duke Power Company (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-669, 15 NRC 453, 475 (1982) (the standard incorporated in Fed. R. Evid. 702 is a suitable test for determining expert status.)

Messrs. Crocker and Allenspach are the principal authors of draft NUREG-0731, which sets forth the principal Staff guidelines for evaluating utility management and technical resources. See generally Tr. 11,987-92. In addition, both Messrs. Crocker and Allenspach have had recent experience reviewing and evaluating the corporate organization and plant staffing of other nuclear utilities. See the Professional Qualifications Statements of Messrs. Crocker and Allenspach attached to their testimony, ff. Tr. 12,653.

Specifically, Mr. Crocker was a Senior Management Engineer in the Licensee Qualifications Branch of the Division of Human Factors Safety of NRR. Mr. Crocker lead the NRC group which drafted NUREG-0731, and recently participated in management reviews of the corporate organizations and plant staffing for the utilities proposing to operate the Sequoyah, Salem, Diablo Canyon and McGuire nuclear plants. Mr. Crocker's other experience includes positions as an NRC Project Manager and a Project Officer in the Army Reactor Branch of the AEC with responsibility for managing, coordinating and supervising contractor activity on a research or development project leading to design of a pressurized water nuclear power plant. Mr. Crocker also has military management experience which included platoon leader, company commander, and battalion commander with various engineer units. Professional Qualifications Statement of

Mr. Crocker, attached to his testimony, ff. Tr. 12,653. Finally, Mr. Allenspach has served the AEC/NRC continuously for over 14 years (since June, 1968) in positions with responsibilities which include the review and evaluation of nuclear utility organizational structure and technical, managerial, and administrative qualifications. Professional Qualifications Statement of Mr. Allenspach, attached to his testimony, ff. Tr. 12,653.

The knowledge and experience of Messrs. Crocker and Allenspach qualify them to present their testimony on Licensee's management and command structure.[19/] As stated by the Licensing Board:

19/ TMIA also criticizes the Licensing Board for relying on the testimony of Staff witness Richard R. Keimig because his qualifications "show absolutely no management training or background." TMIA Brief at 19-20. The Licensing Board was justified in relying on Mr. Keimig's testimony. Mr. Keimig is a Section Chief in the Reactor Operations and Nuclear Support Branch, Office of Inspection and Enforcement, Region I, who is serving as the Region I coordinator for I&E activities related to TMI-1. Keimig, ff. Tr. 11,946, at 1. At the time of the TMI-2 accident, Mr. Keimig's Section was responsible for project overview and implementation of the I&E inspection program for TMI-1 and TMI-2. Id. at 2. Based on these facts, Mr. Keimig is certainly qualified to testify on I&E's view of the major organizational changes since the TMI-2 accident in Licensee's management capability to operate a nuclear power plant.

Finally, TMIA criticizes the Licensing Board for relying on the testimony of Staff Witness Donald R. Haverkamp, the NRC's on-site resident inspector at TMI, because his "objectivity in evaluating GPU's management structure was questioned." TMIA Brief at 20, citing Tr. 12,025-30. A reading of the transcript pages cited by TMIA demonstrates that TMIA's implication that Mr. Haverkamp is not objective is totally unsupported and, indeed, contrary to the evidence. The cited transcript pages show that Licensing Board Member Dr. Little asked Mr. Haverkamp to explain how a resident inspector maintained his independence when on-site among many utility personnel. Tr. 12,025. Mr. Haverkamp, and Mr. Keimig, testified in detail how the independence and objectivity of residence inspectors is maintained, tested, and assured. Tr. 12,025-30. The Licensing Board was satisfied with this testimony, Tr. 12,030, and there is no evidence in the record to the contrary.

> [T]he Board is satisfied that the NRC Staff, based upon their collective experience with nuclear utilities, industry input into the guidelines, and a careful evaluation of the reports of the various investigations into the accident, have the expertise to evaluate the management and command structure of a nuclear utility. Tr. 11,987-97. In any event the NRC Staff's expertise on the subject is, in terms of public health and safety, almost unique.

Management PID ¶ 64 (footnote omitted).

(b) The Licensing Board Did Not Err by Rejecting TMIA Exhibits 49 and 50 and by Denying TMIA's Motion to Reopen the Record on the "Udall Report"

TMIA asserts as error the Licensing Board's failure to admit into evidence the so-called "Udall Report" (TMIA Ex. 49), entitled "Reporting of Information Concerning the Accident at Three Mile Island," dated March 1981, and the June 4, 1981 Memorandum from Edward C. Abbott, ACRS Senior Fellow, to Dr. Dade W. Moeller, Chairman, ACRS (TMIA Ex. 50). These documents were the basis of TMIA's Motion to Require Further Development of the Record, dated July 2, 1981, which requested the Licensing Board to reopen the record to receive them into evidence, and which the Licensing Board denied. Tr. 22,989-90. (Chairman Smith).

The standards for reopening an evidentiary record are well-established.[20/] The proponent of a motion to reopen the record bears a heavy burden. The movant must demonstrate that: (1) the motion is

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20/ See generally Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit 2), ALAB-486, 8 NRC 9, 21 (1978); Kansas Gas and Electric Company, et al. (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 338 (1978); Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-359, 4 NRC 619, 620 (1976); Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973).

timely, (2) the motion is directed to a significant safety or environmental issue,[21/] and (3) a different result would have been reached initially had the material submitted in support of the motion been considered.[22/] Thus, the motion to reopen must be timely and not based on information that reasonably could have been raised prior to the close of the record, it must involve a matter which is of some significance, and it must be such that the outcome of the case will be affected by the alleged new information.

TMIA's motion fails to satisfy these standards. The motion was not timely, since it was not filed until at least four months after the "Udall Report" was available and over two months after the Licensing Board, on May 1, 1981, denied TMIA's request to take official notice of the Udall Report and specifically invited TMIA to file a written motion concerning that document. See Tr. 22,962 (Blake) and Tr. 22,990 (Chairman Smith).

With respect to the second and third criteria, namely the significance of the Udall Report and the question as to whether it would affect the outcome of the Licensing Board's resolution of the issue (CLI-80-5 Issue (10)) for which it was offered, it is clear that TMIA's motion also must fail. The Licensing Board carefully explained that it was familiar with the Udall Report (and other documents concerning flow of

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21/ See Georgia Power Co. (Alvin W. Vogtle Nuclear Power Plant, Units 1 and 2), ALAB-291, 2 NRC 404, 409 (1975); Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973).

22/ See Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear-1), ALAB-227, 8 AEC 416, 418 (1974).

information following the accident at TMI-2) and, although it was not finding any facts on the basis of it or any other documents not in evidence, it did evaluate the document for the purpose of determining whether the Board should pursue the subject matter further. See Management PID ¶ 468-493; Tr. 22,984-92. The Board concluded that the public health and safety would not be adversely affected by the absence of any further investigation. PID ¶ 493; Tr. 22,991-92. As noted by the Licensing Board, "the Commission itself, in the context of its oversight of the Staff's enforcement action, elected not to recommend further censure of individuals because of improper disclosure of information." PID ¶ 492.

In summary, TMIA's motion to reopen the record was not timely and, as made clear by the Licensing Board's detailed evaluation of the Udall Report and comparison of its conclusion with other relevant documents (see PID ¶¶ 485-493; Tr. 22,991-92), did not present new information concerning a significant safety or environmental matter which would cause the Licensing Board to reach a different result.[23/] See, in particular, PID ¶ 490; Tr. 22,991-92 (Chairman Smith). The Licensing Board did not

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23/ TMIA Ex. 50 (the Abbott memorandum), also the basis of TMIA's motion to reopen, expresses the personal view of an individual (an ACRS Senior Fellow, not a member of the ACRS) that he agrees with the conclusion of the Udall Report. With respect to the admissibility of the Udall Report and the Abbott memorandum, the Board ruled that the major defect was the absence of any sponsoring witnesses. Tr. 22,989-90 (Chairman Smith). The Board invited TMIA to present witnesses competent to sponsor the Udall Report, and TMIA chose not to do so, until, on the last day of the hearing, TMIA stated that it could present a witness if the Board so requested. See PID ¶ 490, n.47. The Board considered this offer much too late. Id.

err in refusing to reopen the record or admit TMIA Exhibits 49 and 50 into evidence and TMIA's appeal in this regard is without merit.

(c) The Licensing Board Did Not Err by Not Conducting Its Own Investigation into Mr. Herbein's Role in the Flow of Information Following the Accident at TMI-2

One of the individuals who was the focus of various investigations and reports concerning the information flow following the accident at TMI-2 was Mr. John Herbein, then Licensee's Vice-President for Generation. As noted by the Licensing Board, different reports reached different conclusions regarding the issue of whether TMI managers, including Mr. Herbein, intentionally withheld information from State and Federal officials about the accident. See PID ¶¶ 479-493 and the reports quoted and cited therein. The parties, including TMIA, chose not to litigate the role of Mr. Herbein in the disclosure of information, although the Board would have permitted them to do so. PID ¶ 490. TMIA now argues that the Licensing Board should have conducted its own investigation into Mr. Herbein's role and that the Board erred in failing to do so.[24/]

24/ As pointed out by the Licensing Board, TMIA elected not to litigate the issue of Mr. Herbein's role in information flow. PID ¶ 490. Neither did TMIA timely present a witness competent to sponsor the so-called Udall Report (see the Staff's discussion of the Udall Report in section IV.3.(b), supra.), which TMIA asserts supports the conclusion that TMI managers intentionally and willfully withheld information about the accident in a direct attempt to mislead State and Federal officials. See TMIA's Motion to Require Further Development of the Record, July 2, 1981, at 3. Thus, to the extent that TMIA is now complaining that the record on Mr. Herbein's role in information flow is inadequate, it is due in part to TMIA's inaction in the first instance.

The record shows that the Licensing Board carefully considered the Udall Report for the purpose of determining whether further investigation into the information flow issued was warranted. PID ¶¶ 469-71, 485-489; Tr. 22,991-92. In deciding not to further investigate Mr. Herbein, the Licensing Board considered the fact that the Commission itself chose not to recommend further penalties against individuals because of improper disclosure of information. PID ¶ 492. As the Licensing Board explained after a careful review of the various reports on the issue of information flow (see PID ¶¶ 468-489):

> In order to focus better on the knowledge and comprehension of and disclosures by Mr. Herbein, further extensive investigation, including the testimony of about ten individuals in our preliminary estimate, would be required to add to the data base. This would have diverted us both on and off the record from matters in the case which are more important to the determination of whether Unit 1 can be operated safely and would have extended the length of the hearing very significantly, without any great confidence by us that we could even then reach a conclusion.

PID ¶ 491. The Licensing Board concluded:

> For the reasons set forth above, we concluded that the public health and safety would not be adversely affected if we failed to conduct our own independent investigation into Mr. Herbein's role in the disclosure of information to Commonwealth and NRC officials on March 28, 1979.

PID ¶ 493. The Licensing Board's decision not to investigate this issue on its own is well-founded, thoroughly explained in its PID, and not arbitrary, capricious, or an abuse of discretion as asserted by TMIA.

(d) The Licensing Board Did Not Err by Not Pursuing the Question of Whether Mr. Dieckamp Made a False Statement to Congressman Udall

On May 9, 1979, Mr. Herman Dieckamp, then President of GPU, sent a mailgram to Congressman Udall in which he stated:

> There is no evidence that anyone interpreted the "Pressure Spike" and the spray initiation in terms of reactor core damage at the time of the spike nor that anyone withheld any information.

Staff Ex. 5 (NUREG-0760) at 45, quoting the mailgram appearing in full at Id., Appendix B, at 117-1 to 117-2. Based on statements which indicated that two TMI shift supervisors, who were in the control room at the time of the "pressure spike," observed the pressure recorders register a sudden increase and decrease and that they believed the pressure spike to be real, I&E investigators sought to determine whether Mr. Dieckamp's mailgram was a material false statement. The I&E investigators concluded that:

> for a statement to be considered a false statement under Section 186 of the Atomic Energy Act of 1954 as amended, the statement must be made in a license application or it must be a statement of fact required under Section 182 of the Act. The Dieckamp mailgram was neither of the above. Therefore, it does not constitute a potential material false statement under the Act.

Staff Ex. 5, at 45-46. TMIA argues, nevertheless, that the statement can be considered materially false under normal standards and that the Board erred in not resolving questions surrounding this incident. TMIA Brief at 29. The record does not support TMIA's claim of error.

First of all, because the Licensing Board's inquiry was a broad one involving management integrity, the Licensing Board did not accept I&E's simple test for a material false statement. PID ¶ 501. Secondly, Staff witness Mosley concluded that Mr. Dieckamp believed his statement to be true when made. Tr. 13,060-64 (Mosley). The Board believed that Mr. Mosley's conclusion was reliable and that the I&E investigation was equal to or better than any the Board could make. PID ¶ 501. In

addition, the Board was not aware of any information not in I&E's investigation report which would cast doubt on I&E's conclusion that Mr. Dieckamp believed his statement to be true. Nevertheless, the Board did consider reopening the record to hear directly from Mr. Dieckamp, since it appears that he was never directly questioned on the matter. PID ¶¶ 502, 503. The Board decided not to do so, however, in order to avoid a substantial delay and serious distraction from other issues directly involving the public health and safety, and because the Board believed it could accept I&E's belief (see Tr. 13,062 (Mosley)) that the matter did not warrant additional investigative efforts. PID ¶ 503.

Under these circumstances, the Licensing Board did not err by not pursuing further the question of whether Mr. Dieckamp made a false statement in his mailgram to Congressman Udall.

In summary, contrary to TMIA's claim, the Licensing Board did not fail to resolve issues necessary to provide reasonable assurance that Licensee's management is capable of safely operating TMI-1. See PID ¶ 584.

4. The Licensing Board Did Not Misinterpret or Fail to Enforce the Commission's August 9, 1979 Order (CLI-79-8) Item 1(e) Concerning Simulator Training of Operators

The Commission's August 9, 1979 Order (CLI-79-8) Item 1(e) provides as follows:

> 1. The licensee shall take the following actions with respect to TMI-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.

10 NRC 141, 144. The Aamodts believe that by this provision, the Commission intended that all TMI-1 operators be tested at a simulator. Aamodt Brief at 14. The Aamodts claim that the Licensing Board misinterpreted this provision to require only the training, but not the testing, of all TMI-1 operators on a simulator and, therefore, the Licensing Board failed to enforce Item 1(e) as understood by the Aamodts. Aamodt Brief at 14-15. It is the Aamodts, not the Licensing Board, who have misinterpreted Item 1(e).

The first sentence of Item 1(e), quoted above, requires that the retraining of all TMI-1 reactor operators and senior reactor operators be augmented in the areas of natural circulation, small break loss of coolant accidents, including revised procedures, and the TMI-2 accident. The second sentence provides: "All operators will <u>also</u> receive <u>training</u> 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." (Emphasis added.) There are two operative parts of this sentence: the first requires all operators to receive <u>training</u> on a simulator, and the second requires the Licensee to reexamine all operators in the areas of retraining specified in the first sentence. Thus, the second sentence requires two things: (1) all operators must be <u>trained on a simulator</u> and (2) all operators must be tested by Licensee on the areas specified in the first sentence. Finally, the last

sentence requires the NRC to administer complete examinations to all licensed personnel in accordance with 10 CFR §§ 55.20-23. 10 CFR §§ 55.20-23 requires written and oral examinations by the NRC but does not require simulator testing by the NRC. Thus nothing in Item 1(e) requires the testing of operators on a simulator.

As explained above, the plain meaning of the language of Item 1(e) requires the TMI-1 operators to be trained, but not tested, on a simulator. This is also the Licensing Board's interpretation of Item 1(e), for the explicit reasons set forth by the Licensing Board in the Management PID ¶¶ 543-548.

Finally, it should be noted that, based on Licensee's commitment to the Commonwealth of Pennsylvania,[25/] the Licensing Board has imposed on Licensee a condition precedent to restart which requires all TMI-1 operators who have not previously held NRC licenses to successfully complete at the B&W simulator an NRC - administered examination, in addition to the NRC's written and oral examinations; satisfaction of this condition must be certified by the Staff to the Commission. Management PID ¶ 583(3). Thus, the Licensing Board has required even more regarding simulator training than is required by the plain meaning of Item 1(e).[26/] The Aamodts' appeal with regard to this matter is without merit.

25/ Commitment 2.a. of Licensee Ex. 56. See also Lic. Ex. 59.

26/ As noted by the Licensing Board, the Aamodts urged their interpretation of Item 1(e) on the Licensing Board in a motion dated August 4, 1981. See PID ¶ 543. The Aamodts requested the Licensing Board to require all TMI-1 operators, regardless of whether they have been previously licensed, to be examined by the NRC on a simulator. PID ¶ 543. For the reasons set forth at PID ¶ 543-548, the Licensing Board properly denied Aamodts' late, unsupported motion.

5. The Licensing Board Did Not Err by Failing to Impose Stricter Operator Shift Staffing Conditions

The Licensing Board imposed on Licensee the following license condition:

> 9. At the time of restart, the Staff shall impose and enforce the following conditions for the operation of TMI-1:
>
> (a) At all times when the plant temperature is above 200°F (cold shutdown), Licensee will man all shifts at TMI-1 with a minimum of one NRC-licensed SRO, who will act as Shift Supervisor, a second individual, either NRC-licensed as an SRO or NRC-licensed as an RO and trained as an SRO, who will act as Shift Foreman, and a minimum of two NRC-licensed ROs who will act as Control Room Operators.

PID ¶ 583(9)(a). The Aamodts urge the Appeal Board to find that this condition is inadequate for the safe operation of TMI-1. Aamodt Brief at 17-19. The Aamodts argue that each shift should be manned by a minimum of two licensed senior reactor operators (SROs), in addition to two licensed reactor operators (ROs), citing the guidelines in NUREG-0737[27/] and NUREG-0731,[28/] rather than just one licensed SRO, a licensed RO trained as an SRO, and two licensed RO's as required by license condition 9(a), supra. The record supports the Licensing Board's judgment on the adequacy of this shift staffing requirement.

Realistically, the only issue presented by the Aamodts' arguments on shift staffing is when Licensee will be required to have a minimum of

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27/ Clarification of TMI Action Plan Requirements, November 1980, at 3-12 to 3-13.

28/ Guidelines for Utility Management Structure and Technical Resources (Draft Report for Interim Use and Comment), September 1980, at 6-7.

two licensed SROs on each TMI-1 shift, not whether Licensee will be so required. The record is clear and uncontradicted on the fact that the Commission and the Staff always intended to require Licensee to have two licensed SRO's on each shift, but the issue always has been when that requirement should be imposed.

Prior to the accident at TMI-2, the Staff required licensees to have only one licensed SRO, and two licensed RO's, on each shift.[29/] As a result of the lessons learned from the accident, however, the Staff proposed that an additional SRO be assigned to each shift. This revised shift staffing was required for each new operating license issued since the accident. Plants that were already operating, however, were permitted to maintain their pre-accident staffing levels of one SRO and two ROs per shift. The Staff intended that these plants would be required to meet the new staffing requirements by the then scheduled date of July 1, 1982. Staff Ex. 14 (NUREG-0680, Supp. No. 3) at 22.

Initially, the Staff's position was that Licensee should be required to have two SRO's and two RO's on each shift at restart, thus treating TMI-1 as if it were a new plant being issued a new operating license. Staff Ex. 4 (NUREG-0680, Supp. No. 1) at 11; Staff Ex. 14 at 22. On March 23, 1981, however, the Commission issued an Order (CLI-81-3) in which it stated:

> The Commission believes that Unit One should be grouped with reactors which have received operating licenses, rather than with units with pending operating license applications. It emphasizes though that it expects the Board to find to the contrary when the record so dictates.

29/ The discussions of shift staffing herein pertain to the shift requirements for a single nuclear unit station.

CLI-81-3, 13 NRC 291, 295-96. As a result, the Staff re-examined its position on the shift staffing requirements for TMI-1 and concluded that there was nothing unique about TMI-1 that should cause the Staff to treat TMI-1 as a plant with a pending operating license rather than as an operating plant. Staff Ex. 14 at 22-23. The Staff considered TMI-1's close proximity to TMI-2 and concluded that neither decontamination nor restoration activities at TMI-2 would affect the safe operation at TMI-1. Staff Ex. 14 at 23; Staff Ex. 1 at C4-1 to C4-16. The Staff also considered factors which assured it that staffing each TMI-1 shift with one SRO instead of two would be satisfactory; for example, the Staff considered the presence of fully trained shift technical advisors, the number of shift foremen who previously held SRO licenses, and the additional training and testing required of all TMI-1 operators before they could receive their NRC operator licenses. Staff Ex. 14 at 23.

Thus, the Staff concluded that TMI-1 could be restarted and safely operated under the shift staffing condition imposed by the Licensing Board in license condition 9(a). The Staff made it clear, however, that in the long term, an additional licensed SRO on each shift would provide additional expertise and assistance and the Licensee would be required to meet the additional staffing requirement on the same schedule as other operating plants.[30/] Staff Ex. 14 at 23.

30/ Originally, it was intended that operating plants would be required to satisfy the additional staffing requirements by July 1, 1982. Staff Ex. 14 at 22; NUREG-0737 at 3-13. Pursuant to the Commission's proposed rule published on August 30, 1982, however, operating plants would be expected to meet the additional staffing requirements by January 1, 1983. 47 Fed. Reg. 38,135, 38,136-37 (August 30, 1982).

The only remaining issue, then, is whether the Licensing Board erred in treating TMI-1 as other operating reactors with regard to shift staffing. See CLI-81-3, 13 NRC at 295-96, quoted supra. In this regard, the evidence fully justifies the Licensing Board's conclusion that TMI-1 can be operated safety under license condition 9(a) until implementation of the additional staffing requirements for all operating reactors.31/

The evidence shows that the Staff's original position that two licensed SRO's should be required for restart was carefully reevaluated in light of the Commission's directive in CLI-81-3, supra, to treat TMI-1 as other operating plants unless otherwise justified. See Staff Ex. 14 at 22-23. As noted above, the Staff concluded "that there is nothing unique to TMI-1 that requires a second SRO to be assigned on shift at restart." Staff Ex. 14 at 23. In addition to the factors identified by the Staff as supporting that conclusion (see id.), the Licensing Board inquired into the effect on Licensee's on-site emergency planning of having one licensed SRO instead of two per shift. See PID ¶¶ 558-566. The Staff testified that it did not regard a second SRO as mandatory or necessary for Licensee's emergency response organization.

31/ The Commission has proposed that the additional staffing requirements be effective January 1, 1983. See note 30, supra. Under that proposal, TMI-1 would be required to operate from the time of restart under the additional staffing requirements. In such case, the issue raised by the Aamodts on shift staffing would be moot. In any event, operation of TMI-1 with only one licensed SRO would be for a short time only, if at all. As the Licensee testified, its intent is to staff each shift with two licensed SRO's whenever possible, even if not required to do so. See Tr. 11,665-69 (Hukill and Toole).

Staff Ex. 17 at 3. In fact, Licensee's Emergency Plan requires more personnel on shift than is recommended by the NRC as the minimum number required, and, as a result, Licensee's Emergency Director -- the shift supervisor -- eventually can be relieved of direct involvement in performing the details of some functions that are performed by the Emergency Director of other licensees. Tr. 22,990-91, 22,316 (Chestnut). The Licensing Board therefore concluded that, from an emergency planning standpoint, a second licensed SRO was not required and there is nothing which would warrant not grouping TMI-1 with other operating reactors. PID ¶ 566. The Aamodts have cited no evidence undermining this conclusion, and the Staff submits that there is none.

In summary, the evidence supports the Licensing Board's imposing license condition 9(a) on shift staffing. The Aamodts have failed to show that different shift staffing is warranted and their appeal in this regard should be rejected.

6. The Licensing Board Did Not Err in Striking Aamodts' Testimony Concerning "Fatigue" of Operators

A portion of Intervenor Marjorie Aamodt's prepared testimony addressed the subject of fatigue and its purported effect on the performance of nuclear power plant operators. Aamodt, ff. Tr. 12,931, at 7-8. Mrs. Aamodt attempts to relate fatigue to the length and rotation of shifts. Id. After objections to the admissibility of this portion of the Aamodt testimony by the Licensee (Tr. 12,903-06) and the Staff (Tr. 12,907), the Licensing Board ruled that the "fatigue" testimony would be accepted (and subjected to cross-examination) subject to a subsequent demonstration by Mrs. Aamodt that operator fatigue had a nexus to the TMI-2 accident. Tr. 12,926, 12,930. On March 10, 1981 Mrs. Aamodt

submitted to the Licensing Board a document in which she attempted to show a nexus between operator fatigue and the TMI-2 accident. See Intervenor Response to Board Request for Evidence that Consideration of Control Room Operator Fatigue is Appropriate, March 10, 1981.[32/] The Licensing Board ruled that Mrs. Aamodt failed to adequately demonstrate that operator fatigue had a nexus to the TMI-2 accident or the response to the accident, and, therefore, struck the "fatigue" portion of the Aamodt tesitmony. Tr. 17,256, 17,265-66; Confirmatory Memorandum and Order on Aamodt Motion, April 6, 1981. The Aamodts now claim that the Licensing Board erred in rejecting their "fatigue" tesitmony. Aamodt Brief at 28-29. The Board's rejection of the "fatigue" testimony was proper.

As noted in sections I and II of this brief, supra, the Commission has issued a number of orders providing guidance to the Licensing Board and the parties on the scope of this restart proceeding. In particular, on March 14, 1980, the Commission issued an Order in which it made clear its intent that any party to the proceeding would be permitted to raise as an issue whether a safety concern not specifically listed as a "short-term" item in the Commission's August 9, 1979 Order should be satisfactorily resolved prior to restart, provided that they satisfy the requirements for contentions of specificity and basis and provided "there is a reasonable nexus between the issue and the TMI-2 accident." Order, March 14, 1980, at 2.

32/ Licensee filed a response entitled "Licensee's Response to Intervenor Aamodt's Filing of March 10 Related to Operator Fatigue," March 19, 1981.

The Licensing Board correctly applied this standard to Mrs. Aamodt's "fatigue" testimony. The document primarily relied upon by Mrs. Aamodt in her March 10, 1981 submission for her showing of nexus, the Essex Report,[33/] states that:

> there is no evidence that, at the time of the accident, the actions or inactions of the operators were significantly influenced by fatigue, disorientation, or distractions.

NUREG/CR-1270, Vol. 1, at 23. Neither do any of the other references in Mrs. Aamodt's March 10 submission provide a showing of a nexus between fatigue and the accident or operator response to the accident. See Licensee's Response to Intervenor Aamodt's Filing of March 10 Related to Operator Fatigue, March 19, 1981, at 3-6. It follows that the Licensing Board did not err by rejecting Mrs. Aamodt's testimony concerning fatigue, since it correctly applied the Commission's requirement that there be a nexus between issues and the accident and Mrs. Aamodt was not able to show such a nexus. The Aamodts' appeal on this issue should be denied.

B. The Cheating PID

1. The Licensing Board Did Not Err by Reversing Findings by the Special Master which Were Based on Witnesses' Credibility or Demeanor

TMIA argues that the Licensing Board erred by reversing findings by the Special Master which were based on the Special Master's judgment of witnesses' credibility or demeanor. TMIA Brief at 31, 33-36, 38. See also Aamodt Brief at 20-21. TMIA's argument appears to be that, apart from the merits of a particular finding of fact, it is generally improper

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33/ NUREG/CR-1270, Vol. 1 (Human Factors Evaluation of Control Room Design and Operator Performance at Three Mile Island-2).

for the Licensing Board to reject any findings of the Special Master which depend, in part, on the Special Master's evaluation of witnesses' credibility or demeanor.[34/] As a general proposition, there is no error associated with the Licensing Board's reaching findings of fact and conclusions of law which differ from those recommended by the Special Master.

Section 2.722(a) of the Commission's regulations permit a licensing board to use a special master to take evidence, rule on evidentiary issues, and prepare a report that would become part of the record. 10 CFR § 2.722(a).[35/] Section 2.722(a) further provides, in pertinent part:

> Special Masters' reports are advisory only. The presiding officer shall retain final authority with respect to the issues heard by the Special Master.[36/]

34/ TMIA makes this argument in general (TMIA Brief at 31, 33-34) and specifically with regard to the Licensing Board's rejection of the Special Master's findings concerning Mr. Michael J. Ross, Licensee's Manager of Plant Operations (TMIA Brief at 34-38). The Licensing Board's treatment of the allegations against Mr. Ross will be addressed separately in this brief in section IV.B.5., infra.

35/ In accordance with these provisions and without objection by any party, the Licensing Board appointed Judge Gary L. Milhollin as Special Master. See Memorandum and Order Reopening Record on Matters Related to Cheating, Appointing a Special Assistant, and Scheduling a Conference of the Parties, September 14, 1981, at 3.

36/ Accord Attorney General's Manual on the Administrative Procedure Act (1947) at 83: "In making its decision, whether following an initial or recommended decision, the agency is in no way bound by the decision of its subordinate officer; it retains complete freedom of decision -- as though it had heard the evidence itself." The Attorney General's Manual has been stated by the Appeal Board to be "an accepted authoritative source of information respecting the congressional intent embodied in the APA." Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 404 n.15 (1976), quoting Siegel v. AEC, 400 F.2d 778, 785 (D.C. Cir. 1968).

Thus, under the express language of the regulation, there is nothing improper per se in the Licensing Board's rejection of certain of the Special Master's recommended findings or conclusions.

With respect to findings of the Special Master which were, in part, based on his evaluation of one or more witnesses' credibility or demeanor, the Licensing Board explicitly accorded special weight to the Special Master's observations unless there were other, more objective indicia of credibility. As stated by the Licensing Board:

> There is a subtle and sensitive relationship between the Board with its responsibility as the initial decision maker, and the Special Master as the official who received the evidence. We have identified the need for and have employed guidelines for considering the advice to the Board embodied in the Special Master's Report. Witness credibility depends most often on the substantive content of the witness' testimony, the witness' qualifications, perceived self-interest biases, and opportunity to be informed, or other objective standards. Sometimes, however, Judge Milhollin has judged credibility in part by his observation of the demeanor of the witnesses at the hearing. This reopened proceeding is unusual in NRC hearings in that it concerns suspicions of ordinary human deceit. Fortunately Judge Milhollin has very carefully noted when witnesses' demeanor is important to his conclusions. While of course we would afford some special weight to Judge Milhollin's direct observations of witness demeanor, where his conclusions are materially affected by witness demeanor, we have given especially careful consideration as to whether or not other, more objective credibility criteria are consistent with his conclusions.

Cheating PID ¶ 2036. This demonstrates that the Licensing Board gave great deference to the Special Master's observations of witnesses' demeanor but also fulfilled the Licensing Board's duty under the Commission's regulations to exercise final authority in resolving the issues heard by the Special Master. The Licensing Board, therefore, committed no error in its approach to treating findings by the Special

Master which are based, in part, on the Special Master's evaluation of witnesses' credibility or demeanor.

2. The Licensing Board Did Not Err in its Findings and Conclusions Regarding the Adequacy of the Staff's Investigation of Cheating

The Licensing Board found that, in general, the Staff's investigation into cheating at TMI was "thorough and adequate." Cheating PID ¶ 2078. The Licensing Board had no basis to question the results of the Staff's investigation. PID ¶ 2080. The Aamodts and TMIA, however, criticize the Staff's investigation in several respects. See Aamodts Brief at 30-31; TMIA Brief at 58-59. For the reasons set forth below, these intervenors' criticisms are not supported by the evidence and certainly do not provide any basis for finding that the Licensing Board erred in any respect in its findings and conclusions on the adequacy of Staff's investigation.

Both the Aamodts and TMIA criticize the Staff's investigation of cheating by Messrs. O and W because a management representative of Licensee was present during the Staff's initial inverviews of operators. Aamodt Brief at 31; TMIA Brief at 58-59. The intervenors' criticism of the Staff on this point is contradicted by the evidence on the Staff's conduct of its investigation of O and W, and, in any event, the issue is without significance as far as the restart of TMI-1 is concerned.

The issue of whether Licensee's management constrained the NRC Staff's investigation into cheating was addressed in prepared direct testimony only by the Staff (Staff witness Ward, ff. Tr. 25,274) and by Licensee (Licensee Witnesses Arnold, ff. Tr. 23,590 and Hukill, ff. Tr.

23,913). Their testimony establishes that at the time of the NRC Staff investigation of cheating by O and W, Licensee's President, Mr. Arnold, instructed Mr. Hukill, Vice President for TMI-1, to make a member of management available to accompany Licensee's employees being interviewed, if the employees desired. Arnold, ff. Tr. 23,590, at 5; Tr. 23,653-54 (Arnold). During the Staff's investigation of O and W, Mr. Arnold wanted the I&E investigators to agree to advise each interviewee of their right to have a management official present during their interviews by the NRC, and to accede to the employee's request to have management present if the employee so requested. Ward, ff. Tr. 25,274, at 18. The investigators refused to agree to these conditions, noting that there was no legal requirement to provide such advice to interviewees. Id.; Arnold, ff. Tr. 23,590, at 5. Mr. Arnold then arranged to have each of the employees that staff requested be made available for interview first advised of the foregoing information by a Licensee supervisor. Ward, ff. Tr. 25,274, at 18; Arnold, ff. Tr. 23,590, at 5-6. As a result, each of the persons who were provided such advice by the Licensee chose to have a management official present. Ward, ff. Tr. 25,274, at 18. The investigators were instructed by Mr. Victor Stello, Director of the Office of Inspection and Enforcement, to proceed with the interviews under these conditions because of the need to obtain the information in a timely fashion in light of its obvious interest to the Licensing Board. Id. As a result, only one interview during the Staff's first investigation, which took place offsite, was conducted without Licensee management present. Id.

With respect to the Staff's investigations subsequent to the first one concerning O and W, however, the issue of Licensee's Management presence during NRC interviews was resolved. Tr. 25,479 (Ward). Specifically, the NRC Staff's Mr. Stello sought and obtained a legal opinion of the NRC's Executive Legal Director that the Licensee's personnel being interviewed did not have the right to have a management representative present. Tr. 25,430 (Ward). This opinion was sought for the Staff's second investigation because it clearly involved an allegation regarding management and therefore it would have been inappropriate to have management present in interviews which were to ascertain management's culpability. Tr. 25,429-30 (Ward). Mr. Ward testified that he was present in Mr. Stello's office when Mr. Stello received a telephone call from Mr. Arnold, in which Mr. Arnold acknowledged the NRC's authority to exclude management representatives from the interviews. Tr. 25,430-31 (Ward). Mr. Ward further testified that Mr. Arnold indicated he would cooperate, which in fact Licensee did do fully throughout the rest of the Staff's investigation. Tr. 25,431 (Ward).

All of the NRC investigators, including Mr. Ward, felt that the presence of management did inhibit the free flow of information, although they could not quantify the extent of such inhibition. Id. Nonetheless, it is the Staff's belief that the information that it did obtain in the first investigation was sufficient to resolve the issues that were being investigated. Id.; Tr. 25,424-25 (Ward). Although the Staff disagreed with the Licensee's position regarding management presence during interviews, the Staff did not feel that the purpose of

this constraint was to hinder or interfere with its investigation. Ward, ff. Tr. 25,274, at 19.

Mr. Hukill testified that it was not Licensee's intent or desire to interfere with or constrain in any way the conversation which took place during the NRC interviews. Hukill, ff. Tr. 23,913, at 6; Tr. 23,966-97 (Hukill). In fact, Mr. Hukill felt that the NRC investigation was an absolute necessity. Tr. 23,995 (Hukill). Mr. Hukill also testified that the Staff's investigations were conducted in a very normal, very proper, and very reasonable way. Tr. 23,997 (Hukill).

The Staff felt that Mr. Arnold's position on management presence during the interviews was a product of his understanding of his and his employees' rights, and his concern in protecting these employees' interests during these interviews. Ward, ff. Tr. 25,274, at 19. The Staff did not perceive Mr. Arnold's constraints as being malevolently motivated, notwithstanding the fact that they could have adversely affected the Staff's ability to obtain all of the information that it felt was needed. Id.

Neither the Staff nor the Licensee believe that the presence of Licensee's management personnel during OIE's investigation of O and W had an adverse effect on the adequacy of that investigation. Ward, ff. Tr. 25,247, at 19; Hukill, ff. Tr. 23,913, at 9. Although the NRC's investigators felt that the management presence impeded the free flow of information, the information they did obtain was sufficient to resolve the questions they had. Ward, ff. Tr. 25,247, at 19.

The evidence, summarized above, concerning Licensee's managment presence during Staff interviews with operators regarding cheating by O

and W, is uncontroverted. It provides no support whatsoever for the intervenors' criticism of the Staff's investigation into cheating by O and W.

Even if one believed that criticism of the Staff was appropriate on this issue, however, there is no significance to it as far as restart is concerned and no basis to conclude that the Licensing Board erred in any way related to the issue. As a direct result of the Staff's investigation into cheating by O and W, both O and W were found to have cheated on the NRC's April 1981 operator licensing examination and both resigned from employment with Licensee. See PID ¶¶ 2090-2092. Both the Special Master and the Licensing Board found that the Staff's investigation of O and W was "thorough and effective." PID ¶ 2380; ¶¶ 289, 298, 341 of the Report of the Special Master (Special Master's Report), LBP-82-34B, 15 NRC 918. No party disagreed. See PID ¶ 2380. Since the Staff's investigation into cheating by O and W was fully successful, management's presence during Staff interviews has no significance as far as restart is concerned, as the Licensing Board correctly observed. PID ¶ 2234. No error by the Licensing Board can be based on the intervenors' unfounded criticism of the Staff on the issue.

The Aamodts state without any discussion or even a single citation to the record, that the integrity of the management of the Staff's Office of Inspection and Enforcement is seriously questioned by the issue of Licensee's management presence during I&E interviews as well as by "withholding of information". Aamodt Brief at 31. The Aamodts do not say what information they believe was withheld or by whom, but they do reference their late-filed "Supplement to Aamodt Proposed Findings of

Fact and Conclusions of Law on Issues Raised in the Reopened Proceeding Filed January 18, 1982", March 4, 1982. These late-filed proposed findings were not accepted by the Special Master (See Memorandum and Order, April 14, 1982) and therefore were not specifically addressed by other parties. In any case, the Aamodts' reference to those late-filed findings indicates that the primary basis for their assertion of "withholding of information" appears to be the fact that the incident involving Mr. Musted's possible solicitation of an examination answer from Mr. P was included in an I&E inspection report. (See PID ¶¶ 2148-2162 for a discussion of the incident.) The evidence fully explains the omission of this incident from the I&E report, shows that I&E investigator Mr. Ward himself disclosed the incident during his testimony at the hearing, and provides no foundation for a claim of "withholding of information" by I&E. See Tr. 25,415-18 (Ward). Neither is there any aspect of this proceeding which provides any justification for Aamodts' statement questioning the integrity of the management of the Office of Inspection and Enforcement.37/

In conclusion, there is no basis to find any error by the Licensing Board regarding its findings and conclusions on the adequacy of Staff's investigation of cheating.

37/ Two additional aspects of the Staff's investigation into cheating are criticized by intervenors: the Staff's investigation of the telephone call to KK (Aamodt Brief at 30) and the Staff's failure to use such forensic techniques as the polygraph and handwriting analysis (TMIA Brief at 59). Neither of these criticisms is justified.

With respect to the Staff's investigation of the telephone call to KK (see PID ¶¶ 2179-2185 for a discussion of this incident), both the Licensing Board and the Special Master found that the Staff did

(FOOTNOTE CONTINUED ON NEXT PAGE)

3. The Licensing Board Did Not Err in its Findings and Conclusions Regarding the NRC Licensing Examinations

The Aamodts take exception to the Licensing Board's findings and conclusions concerning the adequacy of NRC operator licensing examinations to measure operator competence. Aamodt Brief at 31-32. The Aamodts offer almost no explanation or support for their broad exception but note that the Licensing Board, in its Management PID, found the NRC licensing examinations to be indicators of operator competence (see PID ¶¶ 268-272) although the Board expressed certain reservations in its cheating PID (see PID ¶¶ 2362-2377). Aamodt Brief at 31. UCS also

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37/ (CONTINUED)

a thorough job of investigation. PID ¶ 2382; Special Master's Report ¶ 292. The Aamodts state, apparently as a criticism, that Licensee's attorney was present during the Staff's interview of Mr. KK (on September 23, 1981) and that Mr. KK had discussed "the matter" with his management and Licensee's attorney before the Staff interview of him. Aamodt Brief at 30. The Staff does not believe that these facts are significant in light of the uncontroverted facts that Mr. KK voluntarily informed the Staff under oath of the telephone call to him (Staff Ex. 27 at 29-30 and Enclosure 8) and that the question which the caller asked Mr. KK was not on the NRC licensing examination (Id. at 31). Mr. KK also testified extensively under oath about the incident. Tr. 26,469-527. There is no basis to challenge the veracity of Mr. KK's testimony.

With respect to TMIA's criticism of the Staff for not using a polygraph test, the record shows that the Staff's Mr. Ward, Chief, Investigations Branch, Enforcement and Investigations Staff, I&E, was asked about its use concerning two individuals, Messrs. FF and U. Tr. 25,383. Mr. Ward testified that, historically, the polygraph is not used in NRC investigations except with management approval where there are grave public safety issues or great financial consequences at stake, neither of which was present concerning Messrs. FF and U. Tr. 25,383 (Ward). Use of the poloygraph was considered, however, concerning Messrs. O and W. Id. Of course, the polygraph was not needed for Messrs. O and W since both confessed their involvement in cheating. Staff Ex. 26. TMIA's reference to handwriting analysis is unexplained and the Staff is not aware of any unresolved issue which might have benefited from handwriting analysis.

criticizes the Licensing Board for its treatment of NRC licensing examinations. UCS Brief at 20-23. The Licensing Board did not err in any respect in its treatment of the NRC licensing examinations.

The adequacy of NRC examinations was specifically litigated in the management phase of the TMI-1 restart proceeding. See Management PID ¶¶ 242-275. The Licensing Board considered the scope of NRC examinations and the grading criteria. Management PID ¶ 268. The Licensing Board concluded:

> We reject the Aamodt attack on the adequacy of NRC's license examinations. In so doing, we take into account not only Mr. Boger's testimony but also the opinions of experts such as Dr. Gardner (who reviewed with favor Mr. Kelly's examinations which were fashioned after NRC examinations), who unanimously agreed that successful completion of such examinations coupled with training sufficient to allow success on those examinations was indicative of a capable licensed operator.

Management PID ¶272 (citations omitted). Thus, when the adequacy of the NRC examination was an issue, and when all parties had a fair opportunity to address that issue, it was found by the Licensing Board to be adequate.

In contrast to the management phase of the hearing, the scope of the reopened proceeding on cheating did not encompass the adequacy of the NRC licensing examinations, as both the Special Master and Licensing Board acknowledged. Special Master's Report ¶ 269; PID ¶ 2363. In fact, the Licensing Board had expressly prohibited the relitigation of that issue in the cheating hearing:

> The Board will not permit a relitigation as to whether the substance of the NRC operators' license examinations are technically adequate to assure that operators are qualified to operate the plant without endangering the health and safety of the public.

Memorandum and Order on October 2, 1981 Conference of the Parties Relative to Reopened Proceeding, October 14, 1981, at 5; see PID ¶ 2363. As the Licensing Board held, therefore, the Staff justifiably did not present evidence, as it could have done, on the adequacy of the substantive content of NRC examinations.[38/] PID ¶ 2364.

With particular reference to the Special Master's criticism of the content of the NRC examination, the Licensing Board stated the following:

> In line with the Board's ruling, the Staff did not present evidence on the adequacy of the substantive content of the NRC examinations. Staff Comment ¶ 18. The Staff was justified in not presenting such evidence and incidentally, further justified in its observation that the Special Master had not taken into account in his criticism of the content of the examination the fact that the examination includes not

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38/ As noted, the Staff did not offer any evidence on this matter in the cheating proceeding. However, in the Staff's Comments on the Report of the Special Master dated May 21, 1982 (Staff Comments), the Staff stated that although it did not seek to rely on any extra-record material on the issue, it did wish to advise the Licensing Board and the parties of the following:

> Additional analysis is being done by the Staff to further ensure, and maintain continual assurance, that the content of the NRC examination is valid. However, the studies that are underway are considering the entire examination process, not just the written examination in isolation. Therefore, the Staff has begun efforts to validate the examination content and process. These studies include a formal content analysis of the written examination questions to identify required cognitive functions and to classify questions by function. The Staff is also considering a computer-assisted, automated system for written examination preparation. This system will allow the written examination to include a mix of questions and test for the skills and knowledge that the validity studies show should be included in the written portion of the examination. Other skills and knowledge will be covered in the operational portions, as they are currently.

Staff Comments at 11, n.5. See PID ¶ 2371. The Licensing Board endorsed this effort. PID ¶ 2372.

> only the written portion but an oral portion more oriented to evaluating problem-solving and analytical ability of the examinee. Staff Comments ¶¶ 19-20.

PID ¶ 2364.

Thus the "reservations" expressed by the Licensing Board in the cheating PID concerning its earlier findings and conclusions on the adequacy of the NRC licensing examinations must be considered in light of the fact that this issue per se was not addressed in the reopened proceeding on cheating. More significantly, notwithstanding those reservations, the Licensing Board, after consideration of the entire record on cheating, explicitly reaffirmed its earlier conclusion on the adequacy of the NRC licensing examinations: "[O]ur conclusion expressed in the August 27, 1981 PID that the NRC examinations are the basic assurance of operator competency remains undisturbed." PID ¶ 2073.

The only concrete argument presented by the Aamodts in support of their broad exception to the Licensing Board's findings and conclusions on the adequacy of the NRC licensing examination is their assertion that no evidence was presented, in either the management phase of the hearing or the reopened proceeding, that the licensing process is valid and that, in fact, the evidence was to the contrary. Aamodt Brief at 32. The Aamodts cite the testimony of Staff witness Boger in support of their claim that the evidence established that the licensing process was not valid. A reading of the very testimony cited by the Aamodts, however, establishes that Mr. Boger gave no such testimony. The single page of the transcript cited by the Aamodts reveals the following questions by Mrs. Aamodt and answers by Mr. Boger:

Q. Are the licensing exams valid?

A. We believe they are, yes.

Q. In predicting control room performance? How have you determined that?

A. I do not believe we can use them as a predicter of performance after the exam. We can only test for demonstrated knowledge at the time of the exam.

Q. So there was no attempt to determine whether they were valid or not?

A. That is not exactly true. The examiners have had a lot of experience in the operation of nuclear power plants. We have seen how they operate. We understand what an operator has to know in order to perform his job, and we base the tests on that experience and knowledge.

Q. So it is an informal type of validity. You do not systematize it in any way.

A. That is correct.

Tr. 12,797. As far as evidence that the NRC licensing examinations are valid, see generally Boger, ff. Tr. 12,770, Gardner, ff. Tr. 12,409, at 14; Chistensen, ff. Tr. 12,409, at 11-13; Kelly, ff. Tr. 12,409, at 10. See also note 38, supra.

In conclusion, although the Licensing Board expressed some reservations regarding the adequacy of the NRC licensing examinations, it expressly reaffirmed its conclusion that NRC examinations are the basic assurance of operator competency. The Aamodts' claim of error by the Licensing Board in this regard is without merit.

4. The Licensing Board Did Not Err by Failing to Reverse or Modify Its Findings and Conclusions On Plant Design Issues

UCS asserts that the Licensing Board erred in authorizing restart in light of the relationship between the record of the reopened proceeding on cheating and the plant design and operational safety issues resolved in the Licensing Board's December 14, 1981 PID. UCS Brief at

23-29. UCS has failed to provide any factual or legal support for its assertion of error.

UCS was candid when it stated that "UCS did not participate in making the record in the reopened proceeding." UCS Brief at 9. Neither did UCS participate in the management phase of the original restart proceeding when operator training, testing, and competence were originally litigated. Nor did UCS propose any findings of fact or conclusions of law on operator competence or cheating in the original or reopened proceedings.[39/] Yet UCS now complains on appeal that the Licensing Board should not recommend that restart be authorized because of the record in the reopened proceeding and its relationship to the plant design and operational issues, specifically mentioning the feed and bleed issue. UCS Brief at 23-25.

To the extent that UCS may be heard at all in this appeal, UCS, as any appellant, is obligated to assert and argue errors of "fact or law." 10 CFR § 2.762(a). UCS admittedly has not asserted any errors of fact by the Licensing Board.[40/] But UCS has not asserted any errors of law either. Rather, UCS has merely set forth its disagreement with the Licensing Board's judgment that the Board's findings and conclusions on

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39/ See 10 CFR § 2.754(b) and note 45, infra.

40/ As UCS stated:

> Because UCS did not participate in making the record in the Reopened Proceeding, we must leave to other parties the detailed discussion of the evidence at points where Judge Milhollin and the ASLB are in disagreement over the facts. For the most part, our arguments go to the conclusions which should be drawn from the facts which have not been disputed by the ASLB.

UCS Brief at 9-10 (footnote omitted).

cheating do not provide a basis for reversing or modifying any of the Board's prior findings or conclusions, including those on plant design and operational safety issues.[41/] See PID ¶ 2423. In contrast to UCS, which participated in only limited aspects of the proceeding and not at all in those aspects involving management competence, operator training and testing, and cheating, the Licensing Board reviewed, analyzed and weighed all the evidence on all the issues. In consideration of all its findings, conclusions, recommendations and conditions in the reopened proceeding on cheating, the Licensing Board explicitly reaffirmed its conclusions on plant design and operational issues, as well as the other issues resolved in the Board's two previous partial initial decisions. PID ¶ 2423. For the reasons set forth in the Licensing Board's Cheating PID and those set forth in this brief, the Staff believes that the Licensing Board correctly reaffirmed its prior PID's and that UCS has not stated any error of fact or law supporting its assertion to the contrary.

In essence, UCS' appeal involves nothing more than UCS' disagreement with the Licensing Board's conclusions and UCS' opinion that the Board should have drawn different inferences from the facts which UCS does not dispute. UCS has demonstrated no error of fact or law by the Licensing Board and its appeal therefore should be rejected.

5. The Licensing Board Did Not Err in its Treatment of the Allegations against Mr. Ross

The Aamodts criticize the Licensing Board for the manner in which it arrived at its findings and conclusions on the allegations against Mr. Michael J. Ross, Licensee's Manager of Plant Operations. Aamodt Brief at 21.

41/ See note 40, supra.

The background of the Licensing Board's resolution of the issues involving Mr. Ross is set forth in PID ¶¶ 2192-2195 and in the Licensing Board's Memorandum and Order Regarding Licensee's Motion to Reopen the Record, May 5, 1982. It demonstrates that because of the importance of Mr. Ross to the operation of TMI-1 and the serious implications of the allegations against him, each member of the Licensing Board closely followed this aspect of the reopened hearing conducted by the Special Master. With the benefit of an advance draft of the portion of the Special Master's Report on Mr. Ross, the Licensing Board evaluated the evidence against Mr. Ross and arrived at tentative conclusions on Mr. Ross which were the opposite of those reached by the Special Master. On May 5, 1982, the Licensing Board distributed to the parties for comment its Tentative Final Draft for Party Comment on the issues involving Mr. Ross. Attachment to Memorandum and Order Regarding Licensee's Motion to Reopen the Record, May 5, 1982. After considering the parties' comments on the Special Master's findings and conclusions on Mr. Ross, as well as their comments on the Licensing Board's tentative findings and conclusions, the Licensing Board's conclusion that Mr. Ross did not act improperly was reinforced. PID ¶ 2195. The Licensing Board's specific findings and conclusions regarding Mr. Ross were published in the Cheating PID at ¶¶ 2192-2225.

The Licensing Board's resolution of the allegations against Mr. Ross, as described above, is merely the exercise of the Licensing Board's duty under 10 CFR § 2.722(a)[42/] to resolve itself all the issues heard by the Special Master. There was nothing erronous per se with the manner in

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42/ See the discussion of this provision in section IV.B.1, supra.

which the Licensing Board resolved the allegations against Mr. Ross. In fact, the parties had far more than the usual input to the Board on the Ross issues: not only did the parties have the opportunity to provide the Licensing Board with comments on the Special Master's advisory report[43/] on Mr. Ross, but they also had the highly unusual opportunity to evaluate and comment on the Licensing Board's tentative draft initial decision on the Ross issues. Considering that no intervenor now complaining of the Board's resolution of the Ross issues even filed proposed findings of fact directly on the Ross issues,[44/] the Licensing Board was exceedingly generous in providing them with the additional opportunity to comment on the Board's tentative findings and conclusions on Mr. Ross. Indeed, under the Commission's Rules of Practice, the intervenors may be deemed to have defaulted on the allegations against Mr. Ross. See 10 CFR § 2.754(b).[45/] Certainly, in these circumstances, the intervenors have no grounds on which to complain about the procedure used by the Licensing Board in resolving the issues concerning Mr. Ross.

With respect to the merits of the issues involving Mr. Ross, the Licensing Board's findings and conclusions are well reasoned and soundly

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43/ See 10 CFR § 2.722(a)(2)

44/ Only the Licensee and the Staff filed proposed findings on the Ross issues. See PID ¶ 2194 n.236; Memorandum and Order Regarding Licensee's Motion to Reopen the Record, May 5, 1982, at 2.

45/ All parties to the restart proceeding were directed by the Licensing Board to file proposed findings of fact and conclusions of law and were cautioned several times that the failure to do so would be deemed a default. See PID ¶ 35 and the citations therein.

based on the evidence. As noted above, each member of the Licensing Board closely followed the cheating proceeding insofar as the allegations against Mr. Ross are concerned. The Licensing Board evaluated not only all the evidence concerning Mr. Ross, but also the Special Master's analysis of, and conclusions from, the evidence, as well as all parties' comments on the Special Master's Report and the Licensing Board's tentative draft decision. As a result, the Licensing Board unanimously concluded that all of the charges against Mr. Ross were unfounded. See PID ¶¶ 2046, 2225. The Licensing Board's findings and conclusions regarding Mr. Ross are fully supported by the evidence and should be upheld by the Appeal Board.

In conclusion, the Licensing Board committed no procedural or substantive error regarding its resolution of the allegations against Mr. Ross. The Aamodts' appeal on this issue, therefore, should be denied.

6. The Licensing Board Did Not Err by Relying on Mr. MM's Comments on the Special Master's Report

Messrs. MM, GG and W provided similar answers to one question on a December, 1980 quiz administered by Licensee. Licensee Ex. 66M; see PID ¶¶ 2124-2128. No party proposed a finding that MM's answer was a result of cheating. See PID ¶¶ 2128, n.231; 2132, n.232. Nevertheless, the

Special Master found that MM probably cheated, but because MM's cheating was limited to a brief answer to only one question and because MM did not testify and thus had no opportunity to answer questions or offer any explanation for his similar answer, the Special Master recommended that no action be taken against MM. Special Master's Report ¶¶ 92, 312.

Because the individuals who were implicated in cheating were not parties to the reopened proceeding, and some, like MM, were not even called to testify, the Licensing Board permitted any individual mentioned in the Special Master's Report to provide the Licensing Board with comments on that Report. Memorandum and Order Regarding Licensee's Motion to Reopen the Record, May 5, 1982, at 4. In a letter to the Licensing Board dated May 18, 1982, Mr. MM submitted comments to the Licensing Board on the Special Master's findings and conclusions concerning himself.

After considering the evidence, the Special Master's Report, and the comments submitted by the parties and by Mr. MM, the Licensing Board found that there was insufficient evidence in the record to conclude that Mr. MM cheated on the December, 1980 quiz. PID ¶ 2132. TMIA claims that the Licensing Board erred and "violated due process" in relying on Mr. MM's comments.

Just as the Licensing Board may consider arguments of the parties, so too may the Licensing Board consider the arguments of non-parties, as amicus curiae, on the significance of the evidence. In this instance, MM's comments on the evidence were considered by the Licensing

Board in evaluating the significance of the sparse evidence against MM. The Licensing Board's only real finding or conclusion concerning MM is that there was not sufficient evidence to conclude that MM cheated. PID ¶ 2132. That finding, although reached after considering MM's comments (along with the evidence and the Special Master's Report), is soundly based on the evidence in the record. There is no basis for concluding that the Licensing Board improperly relied upon Mr. MM's comments.

In any event, TMIA has no right to complain about the Licensing Board's finding of insufficient evidence of cheating by MM. TMIA did not propose any finding of fact that MM cheated. See PID ¶¶ 2128, n.231; 2132, n.232. TMIA therefore may legitimately be deemed to have defaulted on the issue of whether Mr. MM cheated. See 10 CFR § 2.754(b) and note 45, supra.

7. The Licensing Board Did Not Err by Upholding the Special Master's Rejection of the Testimony of Mr. Harry Williams

The Aamodts claim that the Special Master erred in rejecting the testimony of Mr. Harry Williams, one of the Aamodts' witnesses. Aamodt Brief at 13-14.[46/] The Special Master's ruling rejecting that testimony, and the Licensing Board's upholding of that ruling, were both correct.

46/ The Aamodts present no argument as to why they believe that the Special Master's rejection of the Williams' testimony was erroneous as a matter of law. The only discussion of this assertion of error concerns the NRC Staff Inspection Report No. 50-289/82-07, which was the subject of the Staff's August 17, 1982 Board Notification BN-82-84 in this proceeding. That Inspection Report was the basis of the Aamodt's Motion before the Licensing Board to reopen the record. See Motion for the NRC Staff and the Licensee to Show Good Cause and/or Reopening of Record, September 3, 1982 (Aamodt Motion

(FOOTNOTE CONTINUED ON NEXT PAGE)

The Aamodts alleged in the reopened proceeding that Licensee's management was involved in the cheating of personnel on a test given at TMI-1 since the accident at TMI-2.[47/] To support this allegation, the

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46/ (CONTINUED)

to Reopen). The Licensee and the Staff opposed that motion. See Licensee's Answer to Aamodt Motion for the NRC Staff and the Licensee to Show Good Cause and/or Reopening of Record, September 20, 1982; NRC Staff Response to Aamodt Motion to Show Good Cause and/or Reopening of Record, September 23, 1982. In a Memorandum and Order dated September 29, 1982, the Licensing Board ruled that it no longer had jurisdiction over the subject matter of the Aamodt Motion to Reopen and referred it and all parties' responses to the Appeal Board. The Appeal Board affirmed the Licensing Board's jurisdictional ruling and asserted its own jurisdiction over the motion to reopen but deferred ruling on its merits until it can achieve a greater familiarity with the total record. Memorandum and Order, ALAB-699 (October 27, 1982). The Staff will not reply here to Aamodts' arguments on the significance of NRC Inspection Report 50-289/82-07 other than to reassert the Staff's position, set forth in Staff's Response to the Aamodt Motion to Reopen, supra, that there is no merit to Aamodts' argument that the record should be reopened.

47/ Issue No. 6 in the reopened proceeding concerned:

> The existence and extent of Licensee management involvement in cheating as alleged by the Aamodts in paragraph 7 in response to the Board's Order of August 20, 1981.

Paragraph 7 of the Aamodts' September 4, 1982 Response to Board Order [of] August 20 and 25 states:

> 7. NRC did not investigate cheating on prior tests given to licensee personnel, other than a partial review of ATT audits. The cheating incident puts prior testing, including that of non-licensed and contractor personnel, in question. The Board has expressed interest in the propriety of other testing. Board Order -- 8/20 at 3. The Aamodts have been aware (since the cheating incident) of other cheating in tests at TMI-1 since the TMI-2 accident.
>
> Action Required: The Aamodts are prepared to present a witness to testify to management's involvement in cheating of personnel on a test given at TMI-1 since the accident. All tests given at TMI-1, particularly since the accident, should be reviewed by competent and independent consultants for evidence of cheating.

Aamodts proffered the testimony of Mr. Harry E. Williams, Jr. Aamodt Exhibit 11.

Mr. Williams' proffered testimony related to the circumstances of his taking a Radiation Work Permit (RWP) course and test on April 28, 1979, with construction workers employed by a contractor of Licensee. Aamodt Ex. 11 at 1. At the time, Mr. Williams was a security guard at TMI employed by Gregg Security Services. Id. Mr. Williams claims that he witnessed a number of the examinees using "crib sheets" in answering the questions on this RWP test. Id. at 2. He described the crib sheets as being on "Metropolitan Edison" letterhead. Id. Mr. Williams also claims that he was given a RWP sticker for his badge by a Licensee security guard sergeant who knew that Mr. Williams completed only one of four items on a checklist which Mr. Williams claims were required for the receipt of the RWP sticker. Id. at 3-4.

When Mr. Williams was presented as a witness, but before any ruling by the Special Master accepting Mr. Williams' testimony, Licensee's counsel requested and was granted leave to conduct a voir dire examination of Mr. Williams. Tr. 24,984. In the course of that examination it was established that Mr. Williams made false statements on two applications for employment with Gregg Security by answering "no" to the question concerning whether he had ever been dismissed or asked to resign from employment. See Licensee Exs. 74 and 75 and Tr. 24,989, 91-94 (Williams). Mr. Williams also failed to completely identify prior job applications. Licensee Ex. 75 and Tr. 24,994 (Williams).

It was also established that Mr. Williams took some of Licensee's company documents with him when he left employment at TMI. Tr. 25,007-8

(Williams). Mr. Williams admitted that he took those documents in violation of a written, signed pledge (Licensee Ex. 76) that he would not remove documents from TMI during his employment with Gregg without Licensee's express permission. Tr. 25,009 (Williams); see also Licensee Ex. 76. Upon questioning by Counsel for the Aamodts and the Special Master concerning the documents Mr. Williams took, it was established that Mr. Williams entered Mr. Herbein's office (then vice-president of Metropolitan Edison Company) and took the documents (Tr. 75,021-22 (Williams)) because they looked "suspicious" and "important." Tr. 25,026-28 (Williams).

At the conclusion of the voir dire examination, the Licensee moved that Mr. Williams' testimony not be admitted into evidence. Tr. 25,019-21. The Staff and the Commonwealth of Pennsylvania supported that motion. Tr. 25,031. The Special Master ruled that based on the slight probative value of Mr. Williams' direct testimony and the fact that his credibility had been seriously undermined (see generally Tr. 24,984-25,019), the testimony would not be received. Tr. 25,031-32.

The Licensing Board reviewed the record concerning Mr. Williams' proffered testimony and affirmed the Special Master's ruling excluding that testimony. PID ¶ 2226. The Board therefore found that there was no evidence to support the allegations by the Aamodts in paragraph 7 in Aamodt's response to the Board's Order of August 20, 1981. Id.

The record, summarized above, amply demonstrates the unreliability of Mr. Williams as a witness. The Special Master, therefore, properly rejected the proffered testimony by Mr. Williams. See 10 CFR § 2.743(c).

It follows that the Licensing Board did not err in upholding the Special Master's ruling on this point.

8. The Licensing Board Did Not Abuse Its Discretion by Permitting Licensee to Use Messrs. G and H to Operate TMI-1 and Mr. Husted to Instruct Other Operators

Messrs. G and H, control room operators, were found to have cheated on some questions on Licensee-administered quizzes. PID ¶¶ 2096-2115. As a result, the Licensing Board recommended that the Commission initiate a proceeding pursuant to 10 CFR Part 2, Subpart B and 10 CFR § 55.40 to consider the modification or suspension of G's and H's operators' licenses unless G, H and Licensee voluntarily accepted a two-week suspension of G and H without pay in lieu of action against their licenses. PID ¶¶ 2120-2121. G, H and Licensee accepted this proposal and G and H have completed their two-week suspension without pay. "Licensee's Comments on Immediate Effectiveness of Partial Initial Decision (Reopened Proceeding) Dated July 27, 1982", August 20, 1982, at 6.[48/]

The Commonwealth of Pennsylvania does not challenge the Licensing Board's findings of fact regarding G and H but does criticize the Licensing Board for allowing Licensee to use G and H as control room operators. Commonwealth Brief at 27-31. The Commonwealth argues that the Licensing Board should have prohibited Licensee from operating TMI-1 "until appropriate enforcement actions are taken against these individuals." Id. at 30. The Licensing Board had sound reasons for

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48/ Mr. G resigned from Licensee effective October 15, 1982. Letter to the Appeal Board from Ernest L. Blake, Jr., Counsel for Licensee, dated October 7, 1982.

proposing and accepting a two week suspension of G and H without pay as appropriate action against them based on the record.

Messrs. G and H were not parties to the reopened proceeding on cheating, and therefore the Licensing Board, as it stated (PID ¶ 2116), had no authority to penalize them. See Memorandum and Order, CLI-82-31 (October 14, 1980), at 2-4 (the Licensing Board in this proceeding had no jurisdiction to impose a monetary penalty against Licensee). Even if the Licensing Board had jurisdiction over G and H, however, the evidence does not support severe punishment of G and H. See PID ¶¶ 2116-2121. The incidents of cheating on the Licensee's quizzes were limited. PID ¶ 2119. More importantly, G and H did not demonstrate a poor understanding of the training material and have passed their NRC examinations under properly monitored conditions. PID ¶ 2119. Considering these factors, the Licensing Board used its discretion in fashioning a remedy responsive to the record on G and H. As stated by the Licensing Board: "It is a remedy which is within our jurisdiction and is appropriate because it is fair, final, simple, and responsive to the G and H cheating episodes." PID ¶ 2120. In these circumstances, the Licensing Board should not be found to have erred in fashioning the sanction it recommended.

The Commonwealth also criticized the Licensing Board for not ordering sanctions against Mr. DD (Mr. Husted). Commonwealth Brief at 31-33. The Commonwealth does not take exception to the Licensing Board's finding that Mr. Husted did not cheat (Id. at 31), but believes that sanctions should have been imposed on the basis of Mr. Husted's "attitude and integrity." Id. at 32. The record does not justify the Commonwealth's criticism.

The Licensing Board believed that its dissatisfaction with Mr. Husted was not related to his status as a licensed reactor operator. PID ¶ 2168. There was no evidence that Mr. Husted's attitude for which he was criticized was manifested in his performance as an instructor. Id. Still, the Licensing Board required certain changes in Licensee's training program, including the establishment of criteria for the qualifications of instructors and an independent in-depth audit of Licensee's training and testing program. PID ¶ 2421(1), (2); see also PID ¶ 2168. In particular, to assure that Mr. Husted's poor attitude is not reflected in the quality of his instruction, the Licensing Board recommended that the qualifications and performance of Mr. Husted receive particular attention. PID ¶ 2168. These actions are appropriate and do not establish any abuse of discr / the Licensing Board involving Mr. Husted.

9. The Licensing Board Did Not Err by Not Requiring Licensee's Training Instructors to Meet the New Qualifications Criteria Prior to Restart

Based on the evidence in the reopened proceeding concerning Licensee's training and testing program, the Licensing Board imposed four conditions on TMI-1 to be satisfied within two years after restart is authorized. PID ¶ 2347. In particular, the Licensing Board imposed the following condition:

> (2) Licensee shall establish criteria for qualifications of training instructors to ensure a high level of competence in instruction, including knowledge of subjects taught, skill in presentation of knowledge, and preparation, administration, and evaluation of examinations.

Id. The Commonwealth argues that while conditions (1), (3) and (4) of PID ¶ 2347 are "clearly prospective remedies", condition (2) should be

required prior to restart. Commonwealth Brief at 34. The Staff does not believe that condition (2) needs to be satisfied prior to restart.

As the Commonwealth concedes, the Commonwealth did not propose any findings of fact or conclusions of law in the reopened proceeding on the issue of Licensee's training and testing program. Commonwealth Brief at 34; see Commonwealth of Pennsylvania's Proposed Findings of Fact and Conclusions of Law on Issues Raised in Reopened Hearing on Operator Cheating, January 15, 1982. The Commonwealth, therefore, may be deemed to be in default on this issue. See 10 CFR § 2.754(b) and note 45, supra. Reaching the merits of the Commonwealth's argument, however, there is no basis to conclude that the Licensing Board erred by not requiring condition (2) to be satisfied prior to restart.

The heart of the Commonwealth's argument is stated by the Commonwealth as follows:

> If the Board's findings are accepted as correct, the major deficiencies in Licensee's operator training program should be corrected prior to restart. This result is mandated by the fact that operator retraining was included as a short-term item in the Commission's August 9, 1979 Order and Notice of Hearing, i.e. an item that must be satisfied prior to restart.

Commonwealth Brief at 34 (emphasis in original). This argument is flawed. Although it is true that operator retraining is a short-term item which must be satisfied prior to restart, see CLI-79-8 Order Item 1(e), 10 NRC 141 at 144, the Licensing Board's condition (2) of PID ¶ 2347 does not address the retraining of operators but rather addresses the qualifications of training instructors. The Commission's short-term Order Item 1(e) has been fully satisfied by the Licensee's retraining and retesting of all TMI-1 operators in the areas

specified in Item 1(e), by the simulator training of all TMI-1 operators on the TMI-2 accident, and by the NRC's reexamination of all TMI-1 operators. In contrast, condition (2) of PID ¶ 2347 requires the establishment of qualifications criteria for Licensee's training instructors. Although the Commonwealth proposes that Licensee's training instructors meet these new criteria prior to restart, the Commonwealth fails to explain how that would contribute to more competent operators at the time of restart. Unless the Commonwealth is also proposing that the operators be retrained once again prior to restart by the newly qualified training instructors, which we do not understand the Commonwealth to be proposing, then there is no additional contribution to safety at the time of restart by the Commonwealth's proposal. Rather, as the Licensing Board recognized, the additional contribution to safety from condition (2) of PID ¶ 2347 is prospective. Under the circumstances, the Licensing Board did not err by not requiring condition (2) to be satisfied prior to restart.

V. CONCLUSION

For the reasons set forth above, the parties' exceptions, addressed herein, to the Licensing Board's management and cheating partial initial decisions, should be denied. Both the Management PID and the Cheating PID should be affirmed in their entirety.

Respectfully submitted,

Jack R. Goldberg
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 19th day of November, 1982

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)
	)	
(Three Mile Island, Unit 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S BRIEF IN RESPONSE TO THE EXCEPTIONS OF OTHERS TO THE ATOMIC SAFETY AND LICENSING BOARD'S PARTIAL INITIAL DECISIONS ON MANAGEMENT AND CHEATING ISSUES" dated November 19, 1982 in the above-captioned proceeding have been served on the following / 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 19th day of November, 1982:

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