417

October 9, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE NUCLEAR REGULATORY COMMISSION

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

UNION OF CONCERNED SCIENTISTS RESPONSE TO CLI-84-18, NEED FOR EVIDENTIARY HEARINGS IN TMI-1 PROCEEDING

INTRODUCTION

By orders dated September 11, 1984, the Commission directed the parties to make submissions concerning generally whether evidentiary hearings should be held on a large number of issues related to GPU's competence and integrity. CLI-84-17, CLI-84-18. While the commission stated in these orders that it had, inter alia, "taken review" of ALAB-772 and ALAB-738, in fact, its action was not taken pursuant to the rule governing Commission-level review of Appeal Board decisions, 10 CFR 2.786, nor under the authority of any other Commission rule or established procedure. The Commission did not make any of the findings requisite to taking Commission review contained in 10

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FR 2.786. It neither found nor could it have found that the Appeal Board decisions were "clearly erroneous" or that an important question of law or NRC policy is involved. See CLI-84-18, Dissenting Views of Commissioner Asselstine, Sl.op at 2. On the contrary, the Commission created a new procedure for the TMI case which is authorized neither by NRC rules or applicable law.

This new procedure required the Intervenors, having once prevailed before the Appeal Board, and without any indication or ruling the the Appeal Board erred, much less "clearly" erred, to again meet the extraordinarily heavy burden of showing why the record should be reopened, this time to the satisfaction of the Commission.

Even beyond this, the Internenors are further required by the Commission's novel procedure to make an evidentiary showing, not only sufficient to meet the burden of re-opening the record, but apparently also sufficient to demonstrate that they would prevail on the merits in a hearing on any such issue:

> The parties in addressing the scope of further hearings, if any, as requested throughout this order, shall designate the specific disputed issues of fact material to a restart decision by the commission on which further evidence must be produced and shall provide their most substantial factual and technical bases for their position on each issue.1-84-18, Sl.op. at 2.

Thus, the Commission apparently intends to make what can only be considered decisions on the merits of the ultimate integrity issues on the basis of Intervenors' submissions which must be make before Intervenors have been given a day in court to

prove their case and to question staff and GPU witnesses. Intervenors are provided 20 days to meet these remarkable burdens, while they are in the midst of preparation for the remanded hearings, which are to go forward until the Commissioners decide whether they are necessary. Moreover, since these submissions must, by definition be based on extra-record material, the order incorporates the premise that the Commission may lawfully consider extra-record material in support of a decision to restart TMI-1. UCS has make a substantial filing arguing that this premise is incorrect. UCS comments on TMI-1 Restart Immediate Effectiveness, July 26, 1984, pp. 1-20. We incorporate those comments herein.

Finally the "reopening" standard is manifestly inapposite to the major issue remanded by the Appeal Board in ALAB-772: whether the training at TMI-1 is substantively adequate to assure operator competence.[1]

The staff's characterization of the Appeal Board decision as upholding the licensee's training program except as to the "examination process itself" (NUREG-0680, Supp.5, p.13-15) is simply false. On the contrary, ALAB-772 remanded the question of whether, in light of evidence showing over-reliance on rote memorization as opposed to understanding and similar substantive

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[1] The Appeal Board stated:
> The Licensing Board correctly framed the issue: is the instruction adequate to prepare the operators to operate the plant safely?...We disagree with the Board, however, on its affirmative answer to that question...
> ALAB-772, Sl.op.at 63.

deficiencies, the substance and implementation of the GPU training program results in operators trained to safely operate the plant. ALAB-772, Sl.op at 63-64.On that issue, the Appeal Board did not "reopen the record" because of newly-discovered information which might change the original result; it ruled that, on the basis of the evidence, Intervenors had prevailed on the merits. That is, the record does not support the finding required by the Commission's original order in this case, that TMI-1 operators have been adequately retrained and their competence assured by GPU and NRC examinations. Therefore, ALAB-772 means quite simply that on the basis of the evidentary record in this case, GPU is not entitled to a decision authorizing restart. The issue was remanded for further hearings to allow GPU another opportunity to win. UCS would be quite content to let the Appeal Board decision stand as the final merits review. It is GPU that requires a reopening of the record, absent a commission reversal on the merits of ALAB-772. In any case, it is apparent that the "traditional standards for reopening" the record (CLI-84-18, Sl.op. at 2) have no bearing on the resolution of the training issues treated in ALAB-772.[2]

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[2] UCS has often noted the curious double standard that universally applies in NRC cases. That is, if applicants prevail, no further hearings are held unless Intervenors can meet the extraordinary burden established for reopening the record. On the other hand, if Intervenors prevail, the record is automatically "reopened" via a remand to allow applicants another bite of the apple, just as happened in this case. Finality applies only against one class of parties. This practice is so ingrained in NRC history that the above discussion assumes that the Commission does not mean to reverse it here and require GPU to show that it meets the standards for reopening the record on the training issue.

As noted by Commissioner Asselstine, the parties have on more than one occasion already addressed, at the Commission's express order, the question of what issues related to GPU integrity and competence must be resolved in hearings and whether they must be resolved in GPU's favor as a precondition to operation of TMI-1. On January 20, 1984, the Commission directed the parties through a memorandum from the Secretary to identify which issues related to GPU integrity are unresolved and which must be resolved prior to restart. The parties were directed to be "attentive to the standards for reopening the record." The parties responded with substantial filings. The Commission never made any response to those filings nor gave any indication that it has considered them. Indeed, every indication is that they had no impact whatever on future commission actions.[3] Again on June 1, 1984, the Commission directed the parties to address themselves to whether, in light of ALAB-772 and "all other relevant information," specifically including the OI investigations and any other extra-record material, the Commission should permit restart. Again lengthy

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[3] For example, on April 26, 1984, the Commission issued a schedule of steps necessary to a vote on TMI-1 restart. It stated in a footnote that it had determined that integrity issues can be separated from restart. Since the purpose of the January 20 Order was to solicit the parties' comments on precisely this issue one can only conclude that they were disregarded or forgotten. We assume that the footnote in the April 26, 1984, schedule of steps was not intended to constitute the Commission's consideration and decision on those comments.

filings were made. See UCS Comments on TMI-1 Restart Immediate Effectiveness, July 26, 1984. The Commission has made no response to these filings nor given any indication that it has considered them. In fact, its latest order suggests that they have not been considered, Since the Commission has again asked for comments on virtually the same issues.

Finally, TMIA and others filed on August 13, 1984, a Petition for Revocation of License of General Public Utilities Nuclear corporatin on the Basis of Deficient Character, supplemented on October 1, 1984, (hereinafter "TMIA Revocation Petition). The petition, with supporting appendices over 300 pages in length, marshalls, explains, organizes and meticulously documents a massive amount of evidence directed to virtually every integrity and competence issue relevant to GPU's fitness to hold an NRC license. The petition draws exclusively upon publicly available documentary evidence, the great bulk of it contained in the underlying documentation (interviews, exhibits) attached to the various OI investigations, the GPU v. B & W trial record, NUREGs 1020 and 0680, Supplement 5, the hearing record in the restart case itself and the United States Attorney's statement of facts in the leak rate falsification criminal case. The petition far more than meets the standard that CLI-84-18 sets for a showing of "factual and technical bases" for Intervenor's positions on specific integrity issues. UCS herein incorporates the petition and the UCS Comments on

TMI-1 Restart Immediate Effectiveness, July 26, 1984. The following discussion is intended as a guide through these two pleadings as they relate to CLI-84-18, with supplementation.

II. Review of ALAB-772

A. Training/Operator Competence

As we discuss above, the standards for reopening the record are inapposite to consideration of this issue, the major issue treated in ALAB-772. UCS does not believe that further evidence must be taken in this issue. On the other hand, unless further evidence is taken or unless the Commission reverses the Appeal Board decision on the merits and rules that the record does support a finding of operator competence and a finding that the pertinent provisions of CLI-79-8 have been met, GPU is not entitled to a decision authorizing operatin of TMI-1. In that case, ALAB-772 would stand as the final decision on the merits of an issue heard on the record, a result which UCS would happily accept. If the question posed is not whether further hearings are needed but, instead, whether further hearings are needed if TMI-1 is to operate, the answer is yes. That is because the current record does not support the findings necessary to restart, for the reasons spelled out in UCS Comments on TMI-1 Restart Immediate Effectiveness, July 26, 1984, pp. 20-31 (hereinafter "UCS Comments").

In brief, those reasons include:

1. The GPU training and testing program undertaken for the express purpose of meeting the post-accident conditions established by CLI-79-8 was so deficient as to preclude assurance that the operators are in fact capable of safely operating TMI-1.

2. The training program was deservedly held in widespread disrespect by the operators.

3. The instructors did not take seriously their obligation to teach nor did the operators take seriously their obligation to learn the required material.

4. The operators were crammed with rote words and phrases as a substitute for understanding. If they failed to recall these phrases on quizzes, they were crammed some more. Operators were taught words rather than what the words meant.

5. Even after operators demonstrated weaknesses in particular subjects, the training program did not remedy these weaknesses. The same questions were asked over and over again on make-up examinations.

6. The GPU examinations are not a reliable indicator of the operators' ability to safely perform the necessary tasks since they are over-reliant on rote memorization and insufficiently related to the skills actually needed to operate the plant.

7. The NRC examinations were not an independent verification of operator competence or of the adequacy of the

GPU training program since they exhibited the same general deficiencies as the GPU tests. The NRC exam did not measure the operators' ability to operate the plant safely; at best, it measured whether they had learned what an inadequate training program taught them. In developing answer keys the NRC examiners were totally dependent upon GPU personnel; the answer keys simply reflected what was in the GPU training program, irregardless of the correctness or sufficiency of the training material.

8. At the corporate level, the most generous interpretation of the facts is that GPU tolerated and permitted an inept, poorly administered training program and widespread cheating.

9. GPU's response to the discovery of cheating shows that GPU was not interested in identifying the cheaters and in rooting out the causes, but was interested in minimizing the evidence of cheating regardless of the objective evidence.

10. GPU presented as its testimony at trial the purportedly independent investigation of a GPU lawyer, Mr. Wilson. He presented only exculpatory evidence and disregarded or failed to pursue much evidence of cheating. He simply accepted the denials of obvious cheaters as conclusive.

11. GPU denied all but the absolutely undeniable - the confessed cheating of O and W, both Shift Supervisors.

12. The GPU expert panel on training relied on so heavily by the ASLB in its original pre-cheating opinion, which

testified in glowing terms of the GPU training program, was oblivious to all of the actual deficiencies in GPU's training program, including the routine "cooperation" on company tests and the substantive deficiencies later documented by the Special Master, Licensing Board and Appeal Board.

All of the above points are discussed and documented by reference to the appropriate decisions in UCS Comments, pp. 20-31, n.15-18 at 45 and pp. 48-52.

If further hearings on training and operator/management competece are to go forward, the over-riding issue is the one stated by the Appeal Board: Is the GPU training program adequate to prepare the operators to operate the plant safely? UCS believes that the sub-issues should be stated as follows:

1. Are the operators equipped to safely operate the plant, particularly in emergency situations?

2. Do the NRC and Company examinations reliably measure the operators' ability to safely operate the plant?

3. Has GPU properly responded to the problems in its training program identified internally and/or by the Special Master the Licensing Board and the Appeal Board?

4. Are the people responsible for the management and implementation of the training program equipped by their own experience and attitude to impart the information and values necessary for safe operation of TMI-1?

5. Do the operators have the appropriate attitude toward the training program, do they believe it is effective?

6. How does the history of GPU's problems with training and its current training program reflect on the competence and integrity of GPU management?[4] Implicit in each of these sub-issues as stated is an issue of material fact which can only be resolved through evidentiary hearings. That is, as to each issue, the current record is unfavorable to GPU and therefore, a restart decision could only be based on new evidence which supported findings favorable to GPU.

The Commission states that, in connection with the training issue it is "particularly interested in the parties' analysis and conclusions regarding the significance of information developed since the close of the hearing record relating to the adequacy of licensee's training program." CLI-84-18, Sl.op at 4. There are two classes of information which may be construed to fall within that category. The first is the volume of publicly-available documents generated by NRC and GPU. These include the Special Report of GPU's Reconstituted OARP (Operator Accelerated Retaining Program) Review Committee, June 12, 1984; the SALP reports on TMI-1; GPU's consultant reports, including the so-called "RHR," "BETA," "Speaker" and "Stier" reports;

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[4] These are the training sub-issues which UCS and TMIA proposed to the Licensing Board. See Memorandum and Order Following Prehearing Conference, July 9, 1984. These issues were generally accepted by the ASLB as necessarily included within the remand ordered by ALAB-772. One notable exception is that the adequacy of the NRC exams was ruled to be res judicata except to the extent that GPU's experts may rely upon them. July 9 Memorandum, p. 4-6. The ASLB has also made it clear that it will not permit litigation of questions of GPU integrity which go beyond the remanded questions.

NUREG-0680, Supp.5, and the OI Investigations and underlying documentation. The other class includes information not previously available or accessible which is just now being developed as the result of ongoing discovery in the remanded proceeding. As the commission is aware, the parties are at this moment in the process of discovering, organizing and evaluating that massive amount of material in order to meet deadlines for the filing of testimony now scheduled for November 1 and 13, with hearings to begin on or about November 15. Indeed, some of the documents which UCS considers most vital to preparation of its case - the GPU operator examinations with the operators' answers for the last two years - have not yet been made available to UCS in readable form, although they should have been produced some three weeks ago. The commission should therefore be aware that with respect to the previously unpublished evidence relevant to these issues, the Intervenors are able to present at this time only a fraction of what will ultimately be used at hearings.

Before turning to the off-the-record material, UCS reminds the Commission that it continues to be our view, which we have fully briefed and argued, that this material may not be lawfully used by the Commission to justify restart of TMI-1 unless and until it is submitted under oath in an in-the-record adjudicatory proceeding where it may be challenged by countervailing testimony and where witnesses may be cross-examined under oath to determine whether the pertinent

facts are as they state and their opinions are otherwise justified and reliable. See UCS Comments, pp. 1-20.

Subject to that reservation, UCS' Comments regarding the significance of the off-the-record material follows:

1. The Special Report of the "Reconstituted" OARP Review committee does not support a conclusion that the GPU training and testing program is adequate to prepare the operators to safely operate the plant.

Among the extra-record material upon which Licensee relies, the Special Report of the Reconstituted OARP Committee, dated June 12, 1984, (hereinafter "Special Report") purports to provide evidence in support of Licensee's arguments that its training program is now adequate to allow restart of TMI-1. This report was submitted to the Commission by GPU which claimed that it argued for immediate restart. To the contrary, as revealed through Licensee's responses to UCS' discovery requests, the Special Report, put together by the same panel of experts whose testimony to the ASLB was so in conflict with later-revealed reality, reflects only the most cursory review that was insufficient to address the most significant disputes about training at TMI-1.

The following points reveal serious deficiencies in the Special Report:

a. The Committee spent a total of only six days reviewing a training program that involves hundreds of subjects and the participation of a large number of people. Of

those days, the Committee spent only three days at TMI. It spent the other days in Parsippany. Thus, the Committee's conclusions are of questionable validity, particularly to the extent that determination of the adequacy of training at TMI-1 involves consideration of specific aspects of the program, as opposed to a general overview of the training as it is described on paper. (Licensee answer to Interrogatory 1 of UCS' Second Set of Interrogatories).

b. The Committee interviewed only one Licensed Operator, and so far as we can tell, no first-line licensed operator training instructors. The remainder of the 17 "individuals contacted" are overwhelmingly GPU management, including the Management of the training program. Thus, the people "contacted" hardly comprise a group that could be expected to give frank , unbiased views. See Special Report, Table A-1.

c. With the exception of Dr. Gardner's attendance at one class being given to engineers on TMI plant systems, the Committee did not observe any actual training. (Licensee answer to Interrogatory 13 of UCS' Second Set of Interrogatories).

d. Only one of the six members of the Committee reviewed any Licensee administered examinations. Even then, he

reviewed only one RO and one SRO examination and answer key for the 1982 and 1983 annual requalification cycles. (Licensee answer to Interrogatory 14 of UCS' Second Set of Interrogatories and to Interrogatory 42 of TMIA's Second Set of Interrogatories).

e. The Committee did not review any of Licensee's Operating Procedures, Emergency Procedures, or ATOG Guidelines to determine whether the training program is consistent with the procedures and guidelines. (Licensee answer to Interrogatory 15 of UCS' Second Set of Interrogatories).

f. Despite Appeal Board questions about the propriety of placing certain persons in positions of authority in the training program, the Committee did not even ask GPU to state its basis for the assignments or promotions of Messrs. Long, Coe, Newton, or Frederick. (Licensee answer to Interrogatory 22 of UCS' Second Set of Interrogatories).

g. Despite the fact that the purpose of the hearings ordered by the Appeal Board is to inquire into the substantive adequacy (content and implementation) of GPU's training and testing program,[5] the Committee,

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[5] If the only "deficiencies" identified had concerned exam security and proctering, the remand would never have been ordered. The case has not been remanded for further evidence on issues such as exam security and proctering; the concern is with substantive deficiencies revealed by the evidence that came in in conjunction with the cheating hearings.

in its purported response to ALAB-772, myopically limited its review of deficiencies and its conclusions regarding whether these have been remedied to "deficiencies in the exam process, e.g., proctoring, exam security, ground rules for exams, procedures for determining if individuals have cheated." (Licensee answer to Interrogatory 28 of UCS' Second Set of Interrogatories). The Committee also believed that the only deficiencies in the training program in the 1979-1981 time period involved the exam process, e.g., proctoring, exam security, ground rules for exam, procedures for determining if individuals had cheated. (Licensee answer to UCS' Interrogatory 3-27). Thus, the Committee did not address the substantive deficiencies that the Appeal Board considered to have been revealed by the cheating incidents and which caused the remand.

h. The Committee did not independently evaluate any of the training instructors according to the detailed rating sheet used by Licensee. (Licensee answer to Interrogatory 31 of UCS' Second Set of Interrogatories). Nor did the Committee conduct any licensed operator instructor evaluations during the preparation of the Special Report. (Licensee answer to Interrogatory 47 of UCS' Second Set of Interrogatories).

i. The Committee did not observe the administration of any examinations by Licensee. (Licensee answer to Interrogatory 38 of UCS' Second Set of Interrogatories).

j. The Committee's review of the training curricula was limited to a briefing by Licensee to the effect that recommended topics were included in the current program. (Licensee answer to Interrogatory 39 of UCS' Second Set of Interrogatories). Based upon this answer, it is clear that the Committee did not evaluate the adequacy of the content of the curricula.

k. The Committee's review of the Basic Principles Training Simulator consisted entirely of one Committee member receiving a briefing from Licensee personnel. The Committee performed no independent evaluation. (Licensee answer to Interrogatory 43 of UCS' Second Set of Interrogatories).

l. The Committee's review of task analyses consist entirely of receiving briefings from Licensee. The Committee performed no independent evaluation. (Licensee answer to Interrogatory 3-3).

m. The Committee mentions "several new programs," including "special B & W simulator training programs . . . to

provide operators experience with the use of major TMI procedural changes, steam generator tube rupture emergency procedures, and other Licensee Event Report (LER) lessons learned." Although these issues are central to the Commission's concerns, the Committee's evaluation of these aspects of the training program was limited to a single briefing by a Licensee representative. The Committee did not review any of the programs first hand. (Licensee answer to UCS Interrogatory 3-7).

n. The Committee did nothing to evaluate the competence of individual operators. (Licensee answer to UCS Interrogatory 3-8).

o. Although the Committee reports high morale among the operators, it did not review the responses of the TMI operators as described in the RHR Report, which revealed substantial morale problems related to the training program. (Licensee answer to UCS Interrogatory 3-14).

p. The Committee did not review in any way the content of the training directed toward the examples cited by ALAB-772 of deficiencies in the training program. (Licensee answer to UCS Interrogatory 3-16).

q. The Committee did nothing to review the consistency of exam question and answer keys with the actual current TMI-1 design, and it undertook no independent review to determine the consistency of the current training information with the actual current TMI-1 design. (Licensee answer to UCS Interrogatory 3-19).

r. Although the company's handling of the cheating incidents is vital to the success of its training program, the Committee did not evaluate the appropriateness of disciplinary action taken against any of the individual operators involved in the cheating. (Licensee answer to UCS Interrogatory 3-29).

s. Based on the above, the Special Report does not constitute reliable evidence, much less an independent review. It is for the most part a packaged regurgitation of GPU "briefings" which evades rather than addresses the issues raised by the Aapeal Board.

t. No member of the Committee has sufficient familiarity with the TMI-1 design to be able to judge such matters as the consistency of training with plant design.

u. The committee does not provide sufficient reliable support for its so-called "bottom line" conclusion that

the GPU training program in fact "produces qualified operators." Special Report, p. 83. Since the plant has not operated since the advent of the "new"program, its success cannot be judged by on-the-job performance. The committee professes that it did not rely on the NRC exams as proof of the qualification of the operators, so the GPU training program cannot be judged by that criterion. Nor can one argue that the successful passage through GPU's training program produces qualified operators, since a) that assumes the truth of the proposition supposedly being proven namely, the adequacy of the GPU training program and b) The Committee did not independently assess the adequacy of the training program; instead, it appears to have sought assurances from GPU on a set of limited issues. Therefore, the "bottom line" conclusion is a classic tautology.

2. The NRC's SALP Report is Not a Reliable Indicator of GPU competence.

This issue is fully discussed at UCS Comments, p. 32-39. In brief, the SALP report is internally inconsistent, in conflict with the staff's own inspection reports, notices of enforcement, ALAB-772 and with objective reality. It is a cheerleading document rather than a fair assessment of GPU performance. Examples are provided at the above-cited pages which are incorporated herein.

3. The 1983 RHR Report reveals the persistence of GPU training deficiencies noted by the Special Master, ASLB and Appeal Board.

GPU hired a consulting company known as RHR which inter alia, surveyed operators' assessment of the success of GPU training. The RHR Report, entitled "Priority Concerns of Licensed Nuclear Operators at TMI and Oyster Creek and Suggested Action Steps" March 15, 1983, contains evidence that large numbers of the licensed operators believe that the training program is deficient in many of the same ways identified by the Special Master, the ASLB and the Appeal Board. Some of the pertinent findings are:

a. Only 60% of the operators agreed that the content of the last exam was job relevant. (RHR Report, unnumbered page headed "Licensing, Requalification and Training").

b. Only one-third of the operators believe that the oral portion of the exam tested how an operator would act in an emergency. Id.

c. A significant minority of operators do not believe that the requalification program promoted safety. Id.

d. Almost three fourths of the operators were dissatisfied with the training for Licensing and even more with the requalification training. Id.

e. Most operators believe the training program is not oriented to the needs of the operators. Id., next unnumbered page.

f. Most operators believe there is not enough training on plant conditions. Id.

g. Three out of four operators believe that the training does not prepare them for what they actually do; instead, it prepares them to pass exams, Id.

h. Operators are dissatisfied with the training for the requalification exams. They feel there is insufficient time devoted to this and that the handling of the repeat courses is boring and often produces a "turned off" attitude. Id., unnumbered page under heading "Issues of Training."

i. Only eight out of ten operators felt that they were better prepared for an emergency as a result of the changes since the TMI-2 accident. Id., Unnumbered page under heading "II Explanatory Material."

j. One-quarter of the operators agreed that operators tended to underestimate the potential danger. Id., next unnumbered page.

k. There is a strong agreement that the procedural complexity is a hazard to safety. Operators agree that they suffer from information overload. Id., 2 pages after.

l. There is considerable feeling that emergency procedures need to be simplified. Id. next page.

m. It was felt that procedures need to be written by individuals familiar with operations. Id.

n. The operators feel that what is taught in training is different than what they experience in the plant. Id., 4 pages after.

o. Operators complain that not enough time is devoted to requalification training, and training is often cancelled at the last moment. Id.

p. There appear to be antagonisms between requalification trainers and licensed operators. Id.

q. The present training program is geared to the needs of the Ex-Navy personnel and out of phase with the need of the operator who comes up through the plant; those who come up from the plant feel left behind and at a disadvantage. Id.

r. Many operators have said that while the training department has grown in size, the staff assigned to operator training has shrunk. They believe the training department is not staffed to handle the range of operator needs. Id.

s. Operators complain about the lack of inter-departmental cooperation. They are greatly dissatisfied with Training policies. Id., 3 pages after.

4. GPU's actions since the close of the record demonstrate that the company does not consistently demand or enforce the highest standards of integrity in its training program.

A series of actions taken and attitudes exhibited by GPU since the close of the record are inconsistent with written policies and assurances that the highest standards of integrity are enforced throughout GPU's training program. These indicate that GPU has given lip source to the lessons which should have been learned from the cheating incidents and is sending signals to operators which undermine rather than reinforce high standards of integrity and accountability. These actions include the following:

a. Husted, a licensed training instructor during the period of cheating, failed to cooperate with NRC investigators, 15 NRC at 957-961, gave "incredible" testimony under oath at the hearing, and displayed such disdain for the training program that the ASLB found his attitude to be 'a partial explanation for the widespread disrespect for the program.' 16 NRC at 318-319. GPU's response was to promote Husted to Supervisor of Non-Licensed Operator Training. The Appeal Board finally directed his removal from that position. Id. at 46. His current position is "Administrator, Nuclear Technical Training." Licensee's Answer to Intervenor TMIA's Second Set of Interrogatories to GPU ("Training"), p. 20, Sept. 12, 1984.

b. Robert Long was Director of Training and Education of GPU during the period of cheating. The ASLB found itself unable to determine from Dr. Long's testimony that he fully understands that his Training Department failed in its respnsibility and that the failure was the principal and proximate cause of the breakdown in the integrity of the training and testing program." 16 NRC at 381. GPU's response was to promote Mr. Long to a position of much greater responsibility, Vice President of Nuclear Assurance, succeeding Mr. Herbein. Id. at 380. See ALAB-772, n. 56 at 71.

c. Shipman is TMI-1 Operations Engineer, second only to

Mr. Ross in the chain of TMI-1 operations command. He gave untruthful testimony at the cheating hearings, as the Special Master, ASLB and Appeal Board agree. ALAB-772 at 35-38. GPU's response was to place a letter of reprimand in his file. Id.

d. G & H , who were found to have obviously cheated on NRC licensing exams (despite GPU's denial that they had cheated), were "disciplined" by a two-week suspension without pay. The ASLB said it has considered ordering GPU to fashion a disciplinary remedy, "but given the fact that the licensee continues to maintain that G & H did not cheat, we have no confidence that the licensee can proceed in an acceptable manner." 16 NRC at 308. G left the company voluntarily sometime later. In exchange for the Commonwealth's agreement to drop its objections, H was shifted off of licensed operator duties. However, UCS has just learned that in June of 1983, with the signed approval of Mssrs. Hukill and Troebliger, H was repaid the full amount of pay for the two weeks he was suspended, with 15% interest "in order to reimburse [H] for any potential financial loss or inconvenience which he may have incurred." GPUN Interoffice Memorandum, June 14, 1983, Lump Sum Payroll check for [H] from D.J. Fick to T.W. Norman.

e. GPU withheld the RHR Report, discussed above, from the NRC because it feared public disclosure of the operators'

assessment of the training program. See TMIA Revocation Petition, A-106-114. GPU then tried to belittle the remarkable results of the RHR surveys by claiming that operators are "not in a very good position to judge the effectiveness of training in teaching them how to operate the plant." Licensee's Response to TMIA's Motion to Reopen the Record, June 6, 1983, p. 15.

f. GPU's continuing position on the so-called "VV" episode is a paradigm of its attitude toward the discovery of cheating and widespread disrespect toward its training porgram. "VV" is Mr. Floyd, who was Manager of Operations for TMI-2, the top operational job. On June 30, 1979, on a make-up examination required for renewal of his operator's license, Floyd submitted answers written by O, a TMI-2 shift supervisor. On August 3, 1979, Gary Miller, then TMI Station manager, with the consent of John Herbein and knowledge of at least Robert Arnold, Mr. Zechman, Ernest Blake, attorney for Met Ed, recertified Floyd in a letter to NRC, attributing test scores to Floyd which were actually O's work. This episode, for which GPU was ultimately assessed a fine of $100,000 for making material false statements to NRC is described at 15 NRC 1006-1013, and 16 NRC 344-355 and NUREG-0680, Supp. 5, p. 7-10-7-11. The incident was covered up for two years, until NRC began an investigation into the 1981 cheating on TMI-1 operator licensing examinations.

At the cheating hearings, GPU , through Mr. Arnold, took the position that Floyd had not cheated. The convoluted rationale was, essentially, that the cheating was too blatant to be consistent with intent to deceive, or intent to successfully deceive - a conclusion totally rebutted by the fact that Floyd did in fact achieve his purpose and NRC was, in fact, deceived.

The cover-up continued after the hearings. GPU hired Attorney Frederick Speaker of the law firm of Pepper, Hamilton and Scheetz to do an investigation of the incident. (It is our understanding that this firm does substantial legal work for GPU). Speaker's written report was sent by GPU to the Commission and Appeal Board without any qualification, from which one can only conclude that GPU endorses it. The Speaker Report, which generally exonerates Floyd and GPU , is a tissue of transparent rationalization, erroneous references, internal inconsistencies and explanations inconsistent with sworn testimony. UCS has analyzed and rebutted it in detail in "Union of concerned Scientists Comments on "Investigation of VV and O Incident,'" July 21, 1983. That document is incorporated herein. A review of the UCS document will show that GPU's adherence to the Speaker Report is evidence of the company's continued failure to establish and adhere to high standards of integrity and accountability and its historic propensity to evade responsibility and seek refuge from uncomfortable truths in pettifoggery.

The NRC staff concludes that "licensee management covered up Floyd's cheating and made a subsequent false certification to the NRC. The staff concludes that these acts demonstrate a deliberate disregard of management responsibilities." NUREG-0680, Supp. 5, pp. 7-11; 13-3-4.

The staff further concludes: "[n]o licensee censure of Miller or Licensee investigation into the involvement of Herbein, Arnold, and Blake is apparent." Id.

This cover-up has continued under all successive versions of the "new"GPU and continues today. It is surely common knowledge among TMI-1 operators and can only serve to signal that the higher-ups are not interested in rooting out and remedying wrong-doing, particularly when it involves management. It is reasonable to assume that an incident such as this reinforces cynicism and sends the message that written policies are procedures are not the real standard by which behavior at TMI-1 is judged.

g. Consistent with the attitude manifested by its commissioning and endorsement of the Speaker Report, GPU has never taken appropriate action against those found by the Boards to have cheated, given incredible testimony or failed to cooperate with

the NRC investigators. GPU's response to the cheating was egregiously inadequate.[6] See UCS Comments, P. 50-51. It consisted of a purportedly independent investigation by a GPU lawyer who consistently closed his eyes to evidence of cheating and uncritically accepted as true the unsupported oral denials of those who did cheat. Id. GPU, through Wilson, denied all but the absolutely undeniable, the admitted cheating of O and W. Its later actions have been consistent with this official myopia. The only persons as to whom GPU has "voluntarily" taken action to this day are O and W, whose dismissal can, in fact, hardly be termed voluntary, since GPU had no choice. GPU's 1983 action in paying H for his two week "suspension" (ordered by the ASLB when GPU took no action on its own) plus 15% interest provides further evidence of the true message being sent to GPU employees.

5. UCS's review to date of evidence discovered in the process of preparing for the remanded training hearings demonstrates that GPU has not remedied the deficiencies in its training and testing program identified by the Special Master, ASLB and Appeal Board:

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[6]The Staff's summary of GPU's response to the discovery of cheating, the so-called "Wilson investigation," is misleading and incomplete. The staff states only that the ASLB found licensee's investigation "adequate." NUREG-0680, Supp.5, p. 7-9. In fact, the ASLB also concluded: "Licensee was culpable in its uncritical acceptance of Mr. Wilson's work when there are so many indications of its inadequacy." 16 NRC at 342. The Special Master, less forgiving to GPU, was much more critical. 15 NRC at 998-1004.

a. GPU does not adhere to the principle that persons assigned to the Training Department should be those of the greatest competence, experience and integrity. The prime example is Mr. Edward Frederick. Frederick, a TMI-2 operator during the time of the accident and thus one of those potentially involved in leak rate falsification,[7] was appointed supervisor of Licensed Operator Training. While in the position and other positions in the training department, Frederick wrote and/or approved the examinations taken by the other operators, instructed trainees and supervised the other instructors. Frederick has received excellent evaluations and consistent promotions for several years. Frederick failed the NRC SRO Instructor Certification examination. On August 23, 1984, although both Michael Ross, Manager, TMI-1 Plant Operations and R.J Toole, Operations and Maintenance Director, certified that Frederick met the requirements to retake the SRO exam, Mr. Hukill withdrew this certification because, inter alia, Frederick barely passed the oral examination, was "not nearly as sharp "as other candidates and had "about a 50-50 chance of passing the NRC's oral exam."[8] GPU Nuclear Memorandum, Subject:

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[7]Frederick's changing of his contemporaneous testimony concerning the accident sequence when he testified as a GPU witness in the GPU v. B & W trial is discussed at NUREG-1020, §3 and NUREG-0680, Supp. 5, pp. 11-1-11-8. Frederick's trial testimony, favorable to GPU's litigation position, is at odds with his own earlier versions of events given right after the accident.

[8]This information was not given in the written certification of Frederick by Mr. Ross. It emerged when Ross was orally questioned by Hukill.

"Final Certification Statement, From: M.J. Ross to H. D. Hukill, July 16, 1984, attaching Mr. Hukill's handwritten comments dated 8/23/84. Such a substandard level of performance is unacceptable for any instructor, much less the Supervisor of Licensed Operator Training. It raises serious questions about the quality of GPU's training and testing programs over the past several years.

b. GPU's system for evaluating operators, instructors and other personnel does not appear to be sufficiently forthright, effective and timely to ensure high competence. The evidence regarding Mr. Frederick, discussed above, is one example. Mr. Frederick's evaluations were excellent and he received continual promotions within the training department for several years, ultimately reaching a level of great responsibility. He was only removed as a pre-emptive action when it became apparent that he would likely have failed the NRC exam for the second time. Moreover, the cited memorandum is strongly suggestive that Mr. Hukill was motivated to personally intervene in the Frederick case primarily because the staff in NUREG-0680, Supp. 5 "indicated it would withhold its TMI-1 Instructor certification such that the licensee will not be able to assign Frederick duties associated with TMI-1 licensed operator training until these issues [his conflicting testimony in the GPU v. B & W trial] are resolved." Id, Hukill handwritten comments at 1. Thus it appears that Hukill was acting to remove a sensitive outside-imposed impediment

to restart rather than exercising normal control over the training program. UCS believes that the evidence shows that other operators have likewise been allowed to retain their status for inordinate periods of time despite clear and repeated evidence of subpar competence.

c. The TMI-1 Licensed Operator instructors have little experience at TMI-1 and/or as instructors. Of the actual instructors (including simulator instructors), as opposed to managers and supervisors, only one has been GPU TMI-1 instructor for over a year. The average experience of the others as TMI-1 instructors is under 6 months. Five out of 9 have 4 months or less experience[9]. Licensee's Answers to Intervenor TMIA's Second Set of Interrogatories to GPU (Training), Sept. 12, 1984, p. 19-24. This staffing appears consistent with the observation of the operators contained in the 1983 RHR report that an inordinate portion of the budgetary increases in the training program have gone to administration. Moreover, it does not inspire confidence in the experience and competence of the actual training staff.

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[9]Two of the instructors are listed as having been "contractors" for a year prior to very recently becoming GPU employees. If the experience as contractor is counted, the averages would rise somewhat. However, it is not possible to tell from the cited material what duties the contractors performed.

d. The evidence indicates that, industry-wide, relatively low average scores on the objective (i.e. written) portions of NRC operator examinations (in the high 70's) are offset by extremely high scores in the subjective oral exams (average 92%) and subjective simulator exams. NRC Staff's Response to Intervenor UCS First Set of Interrogatories to the NRC Staff..., Sept. 18, 1984, p. 10. If this pattern is replicated in the GPU training and testing program, it would indicate at least one of the following:

1. the written exams are not well correlated with the skills necessary to operate the plant;

2. the training department is using subjective and inherently unverifiable standards to bring up the overall scores of examinees.

e. UCS's review to date of the recent GPU examinations raises serious questions about their validity as a measurement of operator competence. In particular, UCS believes that too many questions ask for such elementary knowledge or are otherwise so easy that an operator's score could mask his lack of understanding in important areas by giving undue credit to demonstrations of such elementary knowledge. UCS believes further that the most recent examinations reveal the same pattern of over-reliance on rote memorization of words and phrases documented by the Special Master, ALSB and Appeal Board. UCS also believes that the examinations may not adequately cover the scope of

subject areas as to which operators are supposed to be trained and tested. Multiple questions give undue credit for the same knowledge, neglecting other areas. The above facts, if proven, would establish that the GPU training and testing program does not meet the conditions of CLI-79-8 and does not ensure the operators' ability to safely operate the plant. This conclusion, in turn, would require denial of authorization to restart TMI-1.

B. Unit 1 Leak Rate Falsification[10]

The following material facts are documented, in UCS's view:

1. About 6% of the Unit 1, leak rate tests reviewed by OI involved the addition of hydrogen or water or feed-and-bleed operations, all of which affect leak rate calculations. NUREG-0680, Supp. 5, p. 4-1.

2. Five operators on two out of six shifts were responsible for all hydrogen additions. Id. at 4-2.

3. Operators routinely discarded "bad" leak rate tests, in violation of at least 4 different technical specifications and Administrative Procedures. Id. at 4-10-4-11. See TMIA Revocation Petition, A-220- A-221.

4. At the same time, operators accepted as valid test results showing a net negative leak rate within 1 gpm, although they knew full well that such tests were not consistent with actual plant conditions since a negative leak rate is impossible. OI LR-1, Ex____.

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[10] See UCS Comments, pp. 52-54.

Approximately 40% of the "valid" test results were negative. NUREG-0680, Supp. 5, p. 4-11.

5. Both of the practices described above were also part of the pattern of leak rate falsification at TMI-2.

6. The Staff's conclusion that leak rates were not falsified at TMI-1 is based not on facts but on two extremely dubious unproven assumptions and some semantic circumlocution. The first is that the relatively low percentage of tests showing possible manipulation as compared with TMI-2, where it was a daily event, demonstrates a lack of systematic pattern. The second is that there was a lack of motive to falsify, because it was not hard to get a good leak rate at TMI-1.

The strength of the first assumption is totally undercut by the second. If it was not <u>often</u> necessary to cheat to get a good leak rate at TMI-1, then the relatively low number of manipulations would simply be consistent with the need to cheat. That is, it is just as plausible to interpret the evidence as showing that falsification was necessary less frequently at TMI-1 but was "systematically" undertaken when the need arise. Moreover, the Staff's <u>a priori</u> limitation of the scope of its investigation to looking for a "systematic pattern" of falsification is without justification, nor does the Staff ever offer a definition of the term "systematic falsification." The fact is that leak rate falsification is not inherently

more excusable for being less frequent, if the need to falsify is also infrequent. The rich man who embezzles only occasionally to cover a temporary shortage is no less guilty for that.

7. The bad leak rates were discarded in order to conceal them from NRC and to avoid taking the remedial actions required by license conditions. This is demonstrated, inter alia, by the fact that at least four different tech specs and procedures were violated in the process. Surely such consistency of "error" bespeaks deliberation. See also TMIA Revocation Petition, A-220-A-221 for further evidence of intent.

8. The Staff's claim that the practice of obtaining a leak rate test every shift, followed at both units, was "conservative" is absurd. NUREG-0680 Supp. 5, p. 4-4. Had the operators actually acted upon the results of the tests, instead of throwing away the "bad"ones and accepting as valid negative tests, one might conclude that the practice was "conservative" - that is, that licensee was concerned about closely monitoring plant conditions. However, since the opposite is true and since licensee simply re-did the tests over and over again until a "good" one was obtained, it is manifest that the purpose of doing the tests each shift was to obtain a facially "good" one before the time ran out. UCS believes that the evidence supports a finding that Michael Ross, then and current TMI-1 Supervisor of Operations, bears responsibility for this practice.

9. Ross must have known about the discarding of bad tests and the acceptance of negative tests. He is universally regarded by the operators and NRC as intimately knowledgeable of all aspects of the operation of TMI-1. His professed lack of knowledge of what was actually done with the bad tests is incredible. (01-83-028; Ex. 107 at 13.) It should also be noted that the staff absolves Ross of involvement in the Unit 2 falsifications at least partially because of operators' testimony that he "was a stickler for detail and followed procedures." NUREG-0680, Supp. 5, p. 5-6. This conclusion is inconsistent with the conclusion that he was not aware of what was happening concerning discarding "bad" tests at Unit 1. Could the "stickler for detail" have credibly been unaware of the practice at his own unit, which virtually every operator knew of or participated in and " was common practice at TMI-1 as far back as any of the interviewers could recall." Id. at 4-13. We think not.

10. The staff places undue credibility on the denials of the operators and managers that they falsified or knew of falsification of tests. The operators and managers have a strong motive to dissemble since they are themselves subject to possible criminal prosecution. It is important to recall in this connection that during NRC's 1980 investigation of Unit 2 leak rate falsification, the great majority of interviewees also denied knowledge of the practice, as did all those in mid-level management and technical support positions. TMIA Revocation Petition, A-218-219. However,

the Grand Jury obtained testimony indicating that the vast majority of operators and most shift foremen and supervisors were involved in and/or aware of falsification, despite NRC's inavailibility to obtain such testimony. United States of America v. Metropolitan Edison Co., Statement of Facts Submitted by the United States, February 18, 1984, pp. 17-18. (hereinafter "Statement of Facts").[11] These denials do not constitute creditable evidence that falsification did not take place.

11. The NRC investigators asked questions in such a way as to virtually invite denials of knowledge of leak rate test manipulation. They stated to interviewees that the leak rate issue was "holding up the plant on restarting." TMIA Revocation Petition, A-217.

12. Mr. Ross's denial of knowledge of the loop seal in the TMI-1 makeup tank ("MUT") lacks credibility and undermines the believability of his other testimony. (The existence of a loop seal provides a physical mechanism for manipulation of the leak rate calculations). The existence of a similar loop seal in Unit 2 was discovered by Faegre and Benson in their 1980 report to licensee. GPU states that as a result of the report , the Unit 1 leak rate procedures and hardware

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[11] The U.S. Attorney was extraordinarily critical of NRC's investigation. He stated: "The NRC has not conducted any meaningful investigation; to this day it has used as a pretext the fact that the Grand Jury was conducting an investigation as a vehicle to avoid addressing its responsibilities." U.S. v Met. Ed, Transcript of Proceedings, Feb. 28, 1983, p. 63.

were examined to see if a similar situation existed. NUREG-0860, Supp. 5, p. 4-15 - 4-17. The NRC investigator who inspected the Unit 1 leak rate tests in July, 1983, and discovered a similar loop seal (Id. at 4-16) considers it "inconceivable that Mike Ross or other GPUN representatives were not aware of the loop seal prior to [his] inspection." 01-83-028, Unit 1 Leak Rate Investigation, Ex. 16. See TMIA Revocation Petition, A-213-214. This is corroborated by John Banks, a former operator who confirmed that the existence of the loop seal was plainly evident, fully explained its effect and whose testimony makes it difficult to believe that such a knowledgeable person as Ross could have been unaware of it. Id. at A-216-218.

13. There exist patterns of similarity between the practices at Unit 2 and those at Unit 1 which are strongly suggestive that the Unit 2 falsification extended, albeit on a much smaller scale, to Unit 1. These patterns include:

a. routine discarding of "bad" or unfavorable leak rate tests, in violation of numerous requirements.

b. running leak rates repeatedly on every eight hour shift.

c. retaining as purportedly "valid" and acceptable leak rate tests which showed a negative leak rate, which the operators knew to be impossible and thus not related to actual plant conditions.

d. existence of a loop seal in the MUT which provided a physical mechanism for leak rate test manipulation.

e. implausible initial denials particularly by mid-level supervisory management.

The Commission has asked the parties to address the standards for reopening the record. With respect to the Unit 1 leak rate issue, this was considered and decided favorably to the Aamodts, who made a relevant motion to reopen the record, in ALAB-772, Sl. op. at 149-154. This motion was supported by UCS and the Staff. Id. at 150. UCS endorses the Appeal Board's decision.

With regard to the standards for reopening, we note that there was no real dispute in this regard. In fact, both the Staff and GPU took as their principle positions the argument that questions of Unit 1 leak rate falsification were logically subsumed within the Unit 2 leak rate falsification issue and thus has already effectively been reopened. Id. at 151.

The Appeal Board ordered the reopening because a series of Board notifications in the fall of 1983 disclosed evidence of practices at Unit 1 similar to those at Unit 2, contrary to the Staff's prior conclusion in the SER that such practices had not occurred at Unit 1. Id. at 150-152. No party argued that the Aamodts motion was untimely or that the evidence of leak rate falsification could not change the result of the ASLB decision endorsing management integrity. Id., n. 118 at 152.[12]

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[12]As it did regarding Unit 2 leak rate falsification, the Appeal Board also pointed out that the original ALSB decision was expressly rendered subject to the conclusion of the then on-going DOJ investigation, thus effectively ruling that the outcome could affect the result of the case. ALAB-772, SL.op at 152.

They cannot be heard to so argue at this date.

Finally, the Appeal Board's brief summary of the reports developed by the Staff on Unit 1 leak rate falsification demonstrates that they need not necessarily be read to support the Staff's view on the subject. Id. at 153. At best, the reports raise serious questions regarding integrity: ". . . They are the type of material that is best scrutinized by the licensing Board as part of its review of all of the circumstances surrounding the leak rate testing practices at Unit 1." Id. at 153-154. Absent a reasonable opportunity to develop the evidence on the record, there is absolutely no basis upon which the Commission could decide that the leak rate test practices at Unit 1 do not impugn GPU integrity. It is not free to simply endorse the views of the parties who support restart on how selected portions of the facts should be interpreted without allowing the adverse parties an opportunity to rebut those views on the record.

C. Husted Reassignment

USC has not undertaken an extensive analysis on the Commission's question concerning whether Mr. Husted is entitled to an opportunity for hearing. CLI-84-18 at 4-5. In general, we support the Commonwealth's views. The action in ALAB-772 directing Mr. Husted's reassignment constituted a finding that such reassignment is necessary in order for the Appeal Board to find that operation of TMI-1 meets the conditions of the Commission's order CLI-79-8 and is necessary to conclude that operation of the plant will not unduly risk public health and safety. If such conditions cannot be placed upon operation of TMI-1, any integrity and competence inquiry is a farce, since its findings are unenforceable.

In any case, even in the highly unlikely event that Mr. Husted is unconditionally entitled to a hearing before the action is taken (a different question from whether he is entitled to a hearing afterward), the answer is not to allow the plant to operate while his hearing goes on. Since the Appeal Board's order should be construed as a holding that his reassignment is a necessary condition to a favorable decision on restart, the answer in that case is that his hearing should be held prior to retart.

III. ALAB-738 - Reopening on Unit 2 Leak Rate Falsefication

Summary.

With regard to Unit 2 leak rate falsification, UCS reads CLI-84-18 as primarily seeking the parties' comments on whether considering the shifts in GPU personnel briefly described in the Order at pages 7-8, a hearing is now warranted. UCS's discussion of this subject, with citations to the evidence, has previously been given in UCS Comments, pp.44-48 and 56-60. This issue is also discussed in great detail in TMIA's Revocation Petition at 14-22, A-86-89, A-95-101, A-207-212. Those are incorporated herein.

There can be no serious question but that the systematic, widespread and long-standing falsification of leak rate tests at Unit 2, undertaken in violation of the license conditions and for the purpose of allowing the plant to operate when it should have been shut down for safety reasons, is a grave indictment of the integrity and competence of the licensee and clearly constitutes sufficient reason for denying a license to the utility involved. See UCS Comments, pp.40-43. Indeed, MET ED pled quilty to one and no contest to six other felony counts, an unprecedented event in the history of the civilian nuclear power program. GPU's effort both before and since that guilty plea has been to disassociate itself from the Unit 2 leak rate falsification by reshuffling the assignments of involved or potentially involved individuals, when absolutely unavoidable, to gently nudge some upper management personnel into

"non-nuclear activities" and to make some changes in corporate organization. None of these maneuvers can obscure the following facts which make a mockery of its claim to be a "new" company:

1. The new GPU continues to deny that leak rate falsification took place.

2. The new GPU has to date taken no disciplinary action whatever against any person involved in or responsible for leak rate falsification. No one has been held accountable for admittedly criminal activity.

3. The new GPU withheld its own 1980 investigation, by Faegre and Benson, which substantially confirmed Hartman's charges, until 1983.

4. The new GPU, only under the threat that permission to operate Unit 1 might actually be withheld, finally began its own "investigation," which is not yet completed. Preliminary indications are that this new "investigation" will continue the pattern established by the Wilson (operator cheating), Speaker (VV (Floyd) false certification) and previous Stier (Parks, King, Gischel and Unit 1 leak rate[13]) investigations: it will seek not to face the full implications of responsibility so that problems may be remedied, but will seek to use every possible

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13 See TMIA Revocation Petition, A-99-100

avenue to minimize the problems and to deny rather than correct them.

This continuing coverup is the work of the new GPU and utterly refutes any claim that it has purged itself of responsibility for Unit 2 leak rate falsification.

Discussion of Material Facts

1. Widespread, systematic leak rate falsification took place at Unit 2. NUREG-0680.Supp.5, pp. 5-2 - 5-7. First line supervision and "possibly middle management" was directly involved. Id, at 13-2, At best, "TMI management was responsible for the operational environment that was permissive of poor performance and had loose standards that led to conditions that motivated some operators to falsify leak rate tests." Id. at 5-6.

2. The culpability related to the leak rate falsification is aggravated by the acts being intentional , deliberate and involving persons in high positions. It continued and became much worse after it was discovered by an NRC inspector on October 18, 1978 that "bad" tests were being discarded and ignored. The inspector told at least the Supervisor of Operations, two Shift Supervisors and a Shift Foreman that the action was "shocking" and "a fundamental misinterpretation of the safety requirement." U.S. Attorney's Statement of Facts, Supra, pp. 11-13.

The inspector was assured by the Superintendent of Technical Operation that it would stop. Instead, it got progressively worse. To forestall enforcement action, licensee

submitted a misleading LER essentially portraying the event as an isolated incident (LER-78-62) and promising to instruct the operators in proper procedure. This was false. No instruction took place. After January, 1979, virtually all calculations had to be falsified in order to get "good results." Id. at 13-17.

3. The above is strongly suggestive that higher management levels were directly involved, since an LER was submitted with the agreement of the inspector and since it is not plausible to imagine that upper management was not told of the events during the inspector's visit, which occasioned the LER. Nor is it plausible that mid-level operational management would take personal responsibility for a decision to deliberately and flagrantly violate the promise made to the NRC.

4. Involvement of higher management levels is also consistent with and supported by evidence developed by NRC that the decision not to close the PORV block value to determine the cause of leakage, also in violation of emergency procedures, was a management decision made above the operations level. See NUREG-0680, Supp. 5, pp. 8-17-8-19. The two decisions are clearly related and both very likely stem from a conscious decision to keep the plant operating for financial reasons. Id. at 8-33.

5. The new GPU continues to deny that leak rate falsification took place:

> The company does not admit...that NRC regulations required it to establish, implement and maintain a reactor coolant system inventory balance procedure to demonstrate that unidentified leakage was within allowable limits...The company also does not admit...that its use of the

> inventory balance procedure was...in an effort to generate results which appeared to establish that reactor coolant leakage was within allowable limits. U.S. vs. Met Ed, Transcript of Proceedings, Feb. 28, 1984, pp.44-45.

6. The new GPU has not purged itself of responsibility for the leak rate falsification. On the contrary, the new GPU has continued the coverup. No one has been held accountable nor disciplined for involvement in or responsibility for the leak rate falsification. The decisions to take no action and to continue to deny responsibility have been taken under the stewardship of Mssrs. Arnold, Dieckamp, Kuhns, Clark and Hukill.

7. If there is a new GPU it is either incapable of or unwilling to remedy this situation, as the above facts clearly demonstrate. Thus, it inherits the responsibility of its predecessor.

8. The barring of TMI-2 operators from at least temporarily operating Unit 1 is a sham. Unit 2 operators with clear potential direct involvement in leak rate falsification have been deliberately placed by the new GPU in very important and responsible positions important to safety in TMI-1. For example, Mr. Frederick was made head of licensed operator training, Mr. Zewe was made radwaste operations manager and then replaced by Mr. Mehler. Both were Unit 2 Shift Supervisors. We do not yet know how many others are similarly placed.

9. The staff's conclusion that reasonable assurance of safety can be found because of a "significant change" in GPU's corporate organization as of January 1, 1982 (NUREG-0680, Supp. 5, p.13-1,

is utterly without factual substantiation. For one thing, as we have demonstrated, the "new" organization has done nothing to effectively purge itself; it has continued the attitude of the past organization.

Secondly, the fact is that no significant change occured on January 1, 1982. Met Ed ceded functional control of TMI in 1979, integrating with GPUSC, and GPUN effectively assumed that control in 1980. The TMI-1 license was transferred in a wholly perfunctory fashion in August, 1981. All of the corporations are subsidaries of GPU and all have continuously been under the stewardship of Mssrs. Kuhns and Dieckamp. TMIA Revocation Petition, 14-21. The expanded GPU and its Board continue to report to the same GPU in typical corporate hierarchical fashion. Both Mssrs. Clark and Hukill joined the organization in 1980. Clark was Arnold's deputy and second in command until he recently replaced Arnold. The notion that some fundamental change took place in January 1982 is absurd.

These facts establish that flagrant leak rate falsification took place, that management was involved, that upper management was likely involved and that the "new" GPU bears continuing responsibility for these acts. In UCS's view these conclusions alone are more than sufficient to compel denial of authorization to GPU to operate TMI-1.

IV NUREG-0680, Supplement 5

The Commission has asked the parties to address whether any of the information discussed in NUREG-0680, Supp. 5 requires further reopening of the record. In UCS's view, two issues stand out as clearly falling into this category: 1) the making of material false statements in the licensee's response to NRC's Notice of Violation following the TMI-2 accident and 2) the protracted massaging of GPU's only internal review of the TMI-2 accident to bring it in line with the false NOV response, to shift blame away from GPU in preparation for the company's litigation against B&W and generally to minimize or remove concessions of regulatory violations or even misjudgement on the part of licensee's management. The first issue is a direct and damning indictment of licensee's management integrity. The second issue is also one of integrity as well as competence because it indicates that GPU is not genuinely interested in learning the lessons from TMI-2 when to face them forthrightly might imply fault or responsibility, particularly on the part of management.

A. The False NOV Response

This issue is discussed at UCS Comments, p. 55-56, NUREG-0680, Supp. 5, pp. 8-1 - 8-22 and the TMIA Revocation Petition, A-172 - A-197. The staff has concluded 1) that the licensee's response concerning the PORV and the operator's

reactions during the accident was "inaccurate and incomplete" and 2) the licensee's denial that it violated procedures regarding surveillarce of the efw values was "less than complete and less than acceptable." NUREG-0680, Supp. 5, p.8-21. In UCS's view, these conclusions and the facts which fully support them require the conclusion that material false statements were made to the NRC. We will not here reiterate the details and background of these statements; they are fully discussed in NUREG-0680, Supp. 5, Chapter8.

Beyond that, the following related material facts are relevant to GPU integrity:

1. The NOV response was signed by Arnold and prepared by Edward Wallace. It was reviewed by Dieckamp, NUREG-0680, Supp. 5, p.8-21. UCS does not know who else reviewed it. Wallace held a management position of great responsibility; the degree to which he was relied upon and seen as representing the interests of the company is indicated by the fact that he was the only GPU technical representative to sit at counsel table advising GPU lawyers throughout virtually the entire restart hearings on technical issues.

2. Wallace's current rationalizations for the false and misleading statements are patently implausible. He claims that he relied "very heavily" on statements made by operators. However, the actual statements do not support him. NUREG-0680, Supp. 5, p. 8-16 - 8-18.

3. Consistent with GPU's long-established practice, Wallace has been quietly shifted to that vast GPU universe beyond nuclear activities. Not the slightest hint is forthcoming from GPU that his actions were improper or that GPU disavows them. On the contrary, GPU protects both Mr. Wallace and the corporation by moving him to a non-nuclear position since the NRC staff evinces no further practical interest in individuals once they are so reassigned and, at the same time, the staff continues to endorse the management integrity of those remaining behind at the top who make the reassignment without disavowing the individual's acts. Surely, there is a limit to NRC's toleration of this cynical manipulation, which is analogous to appointing a "designated wrongdoer" and at the same time shielding the individual and the corporation from the consequences.

4. Keaten (V.P., GPUSC), Long (V.P. for Nuclear Assurance, GPUN) and Arnold all continue to deny that there was any attempt to dictate the contents of the task force report because of positions taken in responding to the NOV. Id. at 8-11. These denials are incredible and inconsistent with the overwhelming weight of the evidence discussed in NUREG-0680, Supp. 5, including Keaten's own admission that with regard to the most blatant misstatements contained in the NW response - those related to the PORV - the Keaten task force changed its report without making any review of the purported support for Wallace's opinion: "We simply took his findings and used them." NUREG-0680, Supp. 5, p. 8-13.

The above facts, which are supported by evidence, establish that material false satements were made to NRC and that current GPU management has neither disavowed them nor held anyone accountable. Indeed, current GPU management was involved, particularly Mr. Dieckamp, who personally reviewed the statements and current GPU management's response to the public disclosure of this issue has simply been to move Mr. Wallace out of the line of fire. If these facts are proven, they establish, both alone and in combination with the rest of the long list of intergrity issues, that GPU lacks the integrity to be entrusted with a license to operate a nuclear plant. Thus, these facts have the potential to dictate the result of this case. The standards for reopening a record are met.

B. Laundering the Keaten Report

The following material facts are supported by the evidence:

1. The licensee's only internal "investigation" of the TMI-2 accident, the so-called "Keaten Report" underwent a year-and-a-half long tortuous process of revision upon revision. NUREG-0680, Supp. 5, p. 8-3. See generally, TMIA Revocation Petition, A-172 - A-197. It was not completed until more than a year after the report of the Kemeny Commission and almost a year after the NRC's own Special Inquiry Group Report.

2. A consistant direction of the revisions was to shift blame away from licensees with the dual purpose, of 1) preparing for litigation against B&W and 2) maintaining consistency with the official response to NRC's NOV, which itself contained false statements.

3. The revisions also narrowed the scope of the "investigation" to remove review of management responsibility.

4. Revisions were influenced by GPU's lawyers in the B & W litigation, by the author of the NOV response, by Mr. Dieckamp, Mr. Arnold and others. NUREG-0680, Supp. 5, pp. 8-13 - 8-14. Mssrs. Kuhns and Clark were provided successive drafts. The final report was widely distributed, including to Kuhns, Dieckamp, Arnold, Clark, Wilson, Hukill, Herbein, Long, Finfrock. There is no evidence that anyone within the organization took it upon themselves to correct the misstatements regarding the PORV or the efw pump surveillance issues.

5. Mr. Keaten willingly made the changes "suggested" by Mr. Wallace without even reviewing the material purported to support them. The evidence indicates that Mr. Keaten allowed his task force to be used as a tool in management's effort to deceive NRC. (This does not imply that Mr. Keaten necessarily knew that Wallace's position was unsupportable - but rather that he did not take steps to check when there was ample evidence available to him that Wallace's positions were inaccurate) In the same sense, the task force was used as a tool in the B & W litigation.

6. Keaten claims that he did not put anything in the task force report that their own findings couldn't support. This is plainly not true at least with regard to the PORV issues. Even Keaten admits that, with regard to the PORV, he changed the

report without checking Wallace's documentation. Id. at 8-14. Keaten's claims are not credible.

7. It is irrelevant that the staff cannot find evidence that management instructed Keaten to conform his report to the NOV response. Id. It is abundantly clear that no such instructions were necessary. Keaten and other members of the task force were themselves "management" and apparently needed no overt instructions to conform themselves to the changing needs of the corporate hierarchy. We are unaware of evidence, for example, that any serious effort was made by the task force to contest any proposed changes.

8. While finding that the PORV changes were contrary to facts in the possession of the task force (Id. at 8-14), the staff goes on to conclude that the changes were not the result of improper influence by management, id. If improper enfluence was not exerted, it is because it was not needed. The task force was willing to make the unwarranted changes on Wallace's suggestion alone. This hardly constitutes mitigation.

The above facts establish that GPU lacks the integrity and competence to be entrusted with operation of TMI-1. The company exhibited less interest in genuinely learning the lessons from TMI-2 than in minutely massaging the wording of the document to avoid responsibility.

Indeed, it is astonishing that GPU largely abdicated the job of analyzing the TMI-2 accident to others: the Kemeny

Commission and the NRC. Against the weight of the contrary evidence, the task force members deny that they were manipulated and management denies manupulation.

CONCLUSION

It is UCS's fervent wish that this is the last time that the Interveners will be required to persuade a Board or Commssion of the gravity of the issues discussed herein or to discuss off-the-record material. The time has come to recognize that these questions cannot be resolved off the record and to let the hearing process take its course, unpalatable as that result may be to some.

The Commission should keep in mind that Interveners have not manufactured this evidence nor have they failed to timely pursue each issue as it became public. On the contrary, these public disclosures have come painfully slowly largely because the NRC staff's reluctance to vigorously investigate the questions allowed GPU to avoid the issues for years. This is true of both the leak rate falsification issues and those arising out of the B & W trial record, such as the false NOV response and the Keaten report issues. We are well aware that the Commission is uncomfortable with such statements; we are also aware of the human tendency to react against the bringer of bad news. Nonetheless, it cannot be denied that these issues, particularly in the aggregate, constitute a remarkably powerful

case against GPU integrity and there is no responsible way to proceed other than to consider them.

Respectfully submitted,

Ellyn R. Weiss
General Counsel
Union of Concerned Scientists

Date: October 9, 1984

October 10, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

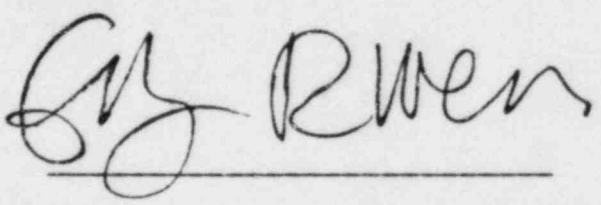
BEFORE THE NUCLEAR REGULATORY COMMISSION

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

CERTIFICATE OF SERVICE

I hereby certify that copies of UNION OF CONCERNED SCIENTISTS' RESPONSE TO CLI-84-18, NEED FOR EVIDENTIARY HEARINGS IN TMI-1 PROCEEDING was served on the following by deposit in The United States mail, first class, postage prepaid, on October 9, 1984, as to those indicated by an asterisk and on October 10, 1984, as to all others.

Ellyn R. Weiss



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