

SECY-82-353



(Commission Meeting)

DISCUSSION

The Atomic Safety and Licensing Board has issued its third Partial Initial Decision (PID) in the matter of TMI-1 Restart. The third and final PID dated July 27, 1982 decides the cheating and related issues heard in a reopened proceeding. The Board's decisions of August 27, 1981 and December 14, 1981 resolved management, hardware, separation of Units 1 and 2, and Emergency Planning issues in favor of restart. This latest decision, the result of a reopened proceeding conducted by a Special Master, Judge Gary Milhollin, into the allegations of cheating by licensed operator candidates, resolves the cheating and related issues in favor of restart. The Board's major conclusion is that the integrity of the training and testing program failed due to quality assurance weakness. It nevertheless found in favor of restart because it believed the remedy could be handled on a long-term basis. The Board has required additional conditions as a result of the reopened proceeding and is now satisfied that the Commission orders of August 9, 1979 and March 6, 1980 have been complied with and that the immediate effectiveness of the original shutdown order can be lifted.

Since the Commission advised the parties by Order of March 10, 1982 that it would not make its immediate effectiveness decision regarding TMI-1 restart until the cheating decision had been rendered, and that decision has now been completed, the Commission may now make decisions regarding the desirability of additional oral argument and other options for completing the Commission immediate effectiveness review process.

In this analysis, OPE discusses

a discussion of
in our

opinion,

As a result of our review
we find

A discussion of

selected issues, which we believe are important
are included below.

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Enclosures:

- 1) Summary of July 27, 1982, Partial Initial Decision on Restart of TMI-1 Operator Examination Cheating and Related Issues
- 2) Summary of Board's Response to Staff Enforcement Plan
- 3) TMI-1 Restart Commission Review Documentation

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ENCLOSURE 1

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SUMMARY OF JULY 27, 1982
PARTIAL INITIAL DECISION ON RESTART OF TMI-1

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OPERATOR EXAMINATION CHEATING AND RELATED ISSUES

INTRODUCTION

The reopened proceeding into cheating occurred due to discovery of cheating by two operators on the NRC SRO exams administered in April 1981. The Board decided that the supplementary proceeding would consider the following issues:

"The Broad Issue. The broad issue to be heard in the reopened proceeding is 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.

Particular Issues.

1. The extent of cheating by TMI-1 operator license candidates on the NRC license examinations in April 1981, and on any other Licensee- or NRC-administered examinations, including but not limited to the following: the Kelly examinations (including Category T) in April 1980; Category T make-up examinations subsequently administered by the company; the ATTS mock examinations in early April 1981; and such other examinations as the Special Master shall deem relevant. These latter shall include any other Licensee-administered qualification or mock exam or NRC-administered exam since the accident at TMI-2.

2. The adequacy of the Staff's investigation of, and NRC response to, the cheating incident and rumors of cheating in the April 1981 NRC examinations.
3. The adequacy of Licensee's investigation of, and Licensee's response to, cheating or possible cheating in the examinations listed in Issue 1 above.
4. [Proposed Issue 4 was combined with Issue 3.]
5. The extent of Licensee management knowledge of, encouragement of, negligent failure to prevent, and/or involvement in cheating in the above mentioned NRC and Licensee examinations.
6. 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.
7. The existence and extent of Licensee management constraints on the NRC investigation of cheating and rumors of cheating in the NRC April 1981 examinations.
8. The adequacy of Licensee management response to the incident in July, 1979, referred to in the OIE investigation report and involving one of the two operators terminated as a result of cheating on the NRC April 1981 examinations.
9. The adequacy of Licensee's plans for improving the administration of future Licensee qualification examinations for licensed operators and candidates for operator licenses, including the need for independent administration and grading of such examinations.
10. The adequacy of the administration of NRC licensing examinations for TMI-1 personnel, including proctoring, grading, and safeguarding the integrity of examination

The July 27, 1982 Partial Initial Decision on the Reopened Proceeding into cheating resolves the issues in favor of allowing TMI-1 to restart. The Board found that most, if not all, cheating had been identified, and that, despite the fact that a small percentage of operators did cheat (approximately 10%), "...our overall impression is that, as a group, they have performed well under very demoralizing and stressful circumstances." Since there will be an adequately trained staff available, the Board saw no safety consequences resulting from the cheating episodes. Rather, its major finding was that licensee's oversight of the training delivery system was deficient, and it proposed license conditions and a fine as a remedy. The Board also found that TMI-1 upper level management was not involved in the cheating and provided a satisfactory response to it.

THE EXTENT OF CHEATING

O and W. O and W were shift supervisors whose cheating on the April 1981 NRC examinations was the cause of the reopened proceeding on cheating. An NRC consultant, in grading the April SRO exams, originally discovered similar and in some cases identical answers on O's & W's SRO exams. Later substantial similarities were also found in their answers to company-administered examinations and the NRC April RO examinations. They subsequently admitted to cheating, were asked to resign by the licensee, and did resign. The Special Master concluded that additional sanctions were warranted in this case and recommended criminal prosecution. While the Board adopted the Special Master's findings regarding the fact of O's & W's cheating, it did not endorse the recommendation for criminal prosecution, as it felt there was no safety benefit from such action and the Department of Justice has already indicated that it is not interested in such a prosecution.

G and H. G and H are reactor operators who came under suspicion of cheating based on marked similarities in a number of their answers on company-administered weekly quizzes. The similarities were identified by a licensee consultant hired after the original cheating incident on the April NRC exams came to light for the purpose of reviewing licensee

Master's Report. Due to greater similarity in answers between GG and W on this quiz, the Special Master concluded they cooperated, and the Board agreed. However, like the Special Master, the Board adopted no sanction, mainly due to tenuousness of the analysis and the fact that only one instance was involved.

Mr. Shipman Responding to a Question During the Exams. After inquiries into cheating had begun at TMI-1, Mr. Shipman, the plant operating engineer, voluntarily came forward and reported to TMI-1 Vice President Hukill that he, Shipman, had probably aided a test-taker by answering a question during exams given in April 1981. Shipman stated that he was at the coffee machine when a presumed license candidate asked him a question which Shipman believed was on the exam. He responded with an answer without thinking and only became concerned that this might be cheating at a later time. No other evidence was ever presented regarding this incident, and throughout separate inquiries by Hukill, NRC investigators, GPU Nuclear President Arnold, and throughout examination at the hearing, Shipman maintained that he could not remember who the individual was who asked the question. The licensee formally reprimanded Shipman for using poor judgment in providing an answer. The Special Master, while accepting this discipline as appropriate, was more concerned that Shipman was knowingly concealing the identity of the questioner, i.e., protecting a cheater. Having reached this conclusion, the Special Master recommended that Shipman not be allowed to help operate TMI-1 until he identifies the questioner. The Board disagreed with this recommendation, stating that the evidence was not so conclusive as to support beyond doubt that Shipman does remember who asked the question. The Board was satisfied without imposing additional sanctions.

Mr. Husted Soliciting Help from P on the NRC Exams. Mr. Husted, a licensed operator instructor, took the April NRC exams in a room with only one other test-taker, a shift supervisor identified as P. During an interrogation of P by NRC investigators, P reportedly stated that Husted had asked him, P, for an answer to an exam question while the room was unproctored, and that P refused to provide it. At the hearing

2. The adequacy of the Staff's investigation of, and NRC response to, the cheating incident and rumors of cheating in the April 1981 NRC examinations.
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8. The adequacy of Licensee management response to the incident in July, 1979, referred to in the OIE investigation report and involving one of the two operators terminated as a result of cheating on the NRC April 1981 examinations.
9. The adequacy of Licensee's plans for improving the administration of future Licensee qualification examinations for licensed operators and candidates for operator licenses, including the need for independent administration and grading of such examinations.
10. The adequacy of the administration of NRC licensing examinations for TMI-1 personnel, including proctoring, grading, and safeguarding the integrity of examination

materials; the adequacy of the Staff's review of the administration of Licensee's Category T examinations; and the adequacy of the Staff's plan for retesting operators and monitoring its NRC examinations to assure proper adherence to NRC testing requirements in order to assure that the purposes of the NRC examinations, because of the nature of the questions, cannot be defeated by cheating, the use of crib sheets, undue coaching or other evasive devices.

11. The potential impact of NRC examinations, including retests, and operator terminations on the adequacy of staffing of TMI-1 operations.
12. The sufficiency of management criteria and procedures for certification of operator license candidates to the NRC with respect to the integrity of such candidates and the sufficiency of the procedures with respect to the competence of such candidates."

A Special Master, Gary Milhollin, was appointed by the Atomic Safety and Licensing Board to conduct hearings into allegations of additional cheating and issued a report to the Board on April 28, 1982. To protect the privacy of individuals, an agreement was reached between the parties stipulating that names of those so desiring would be represented by letter designations. Those designations are used throughout the record. The Special Master's findings and conclusions were not binding, but served as advice and recommendations to the Licensing Board, which remained responsible for making the initial decision and all findings and conclusions regarding cheating. Because the Special Master and Board differ significantly on many of the issues, this summary identifies and discusses both similarities and differences as they occur. Attachment 1 to this Enclosure presents the issues and notes the special Master's and Board findings in tabular form. The issues are presented in the order used by the Board in its PID, which differs slightly from that found in the Special Master's Report.

The July 27, 1982 Partial Initial Decision on the Reopened Proceeding into cheating resolves the issues in favor of allowing TMI-1 to restart. The Board found that most, if not all, cheating had been identified, and that, despite the fact that a small percentage of operators did cheat (approximately 10%), "...our overall impression is that, as a group, they have performed well under very demoralizing and stressful circumstances." Since there will be an adequately trained staff available, the Board saw no safety consequences resulting from the cheating episodes. Rather, its major finding was that licensee's oversight of the training delivery system was deficient, and it proposed license conditions and a fine as a remedy. The Board also found that TMI-1 upper level management was not involved in the cheating and provided a satisfactory response to it.

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exams for instances of cheating. The Special Master concluded that five sets of nearly identical responses on these quizzes were due to "cooperation," i.e., cheating. He reached this conclusion after obtaining no believable explanation from G or H as to how else their answers could be so similar, particularly since some were wrong and no evidence was presented to support the claim that the similarities were due to their memorizing training material together. The Board agreed that four of the five nearly identical responses were due to cooperation. While the Special Master recommended as a remedy prohibiting G and H from operating TMI-1, the Board concluded that such a sanction was too strong and was inappropriate without notice and opportunity for a hearing. The Board chose to recommend instead that the licensee and G and H voluntarily accept a two-week suspension of G and H without pay as a substitute for initiation of a proceeding to consider suspending G's and H's licenses. (By notice of August 6, 1982, licensee notified the Board and parties that G and H had elected to accept the suspension and that licensee had already placed it into effect.)

S and Y. S and Y, a shift supervisor and reactor operator, respectively, were found to have submitted one identical and some other very similar answers to questions on a company quiz. It was determined during the hearing that the responses were virtually verbatim recitals of licensee training materials. The Special Master concluded that their joint memorization of training material was the most plausible explanation for these similarities and that cooperation was not supported by the evidence. The Board agreed with this finding.

GG, W and MM. GG, W, and MM provided very similar answers to two questions on a company quiz. (Note that W had already been identified as having cheated on other tests.) The similarities were particularly suspicious because all three individuals misspelled the word challenge in the same way, as "challange". Both the Special Master and Board found that the evidence was inconclusive regarding MM, apparently because the similarities were minimal, MM had little motive to cheat as he was not required to take the quiz, and MM provided a plausible explanation for the similarities in his written comment to the Special

Master's Report. Due to greater similarity in answers between GG and W on this quiz, the Special Master concluded they cooperated, and the Board agreed. However, like the Special Master, the Board adopted no sanction, mainly due to tenuousness of the analysis and the fact that only one instance was involved.

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Husted denied the allegation. More importantly, P denied at the hearing that he had made the statement during the interview. The Special Master, choosing to believe the NRC investigator's view of what happened, and having concluded from his observation of P's demeanor at the hearing that he was lying, found that Husted had solicited an answer from P and hence cheated. The Board disagreed, finding that the original reported allegation occurred during the course of an interview in which two investigators were trying to "trick" P into supplying derogatory information. The Board chose to believe that the NRC investigator misinterpreted or misunderstood P's response and that P was not lying during the hearing. Since the investigators did not take notes regarding this incident or have it included in a statement by P, the Board believed there was an opportunity for confusion. The Special Master also found that P was not truthful in failing to admit that other operators had cooperated on quizzes at times. The Board, however, decided to reach no conclusion unfavorable to P or Husted.

Mr. Husted's Attitude. Mr. Husted generally displayed an uncooperative attitude regarding the NRC investigation. He initially refused to discuss rumors with investigators and displayed what was termed a flippant manner in his testimony. He stated that he disapproved of the way in which the investigation was being conducted. It appeared that he showed disrespect to both the investigation and the reopened proceeding. The Special Master would have sanctioned Husted, but did not know what sanction would be appropriate. The Board agreed that Husted's attitude reflected adversely on his ability to impart a sense of responsibility and seriousness to the operators he must teach. The Board recommended that Husted's performance as an instructor be one of the specific topics of a general review of the training program which was separately recommended by the Board.

Allegations Concerning U. U is a shift foreman who was rumored to have been involved in a number of instances of cheating. First, it was rumored that he was stationed in Mr. Husted's office near the exam rooms during the second set of April exams for the purpose of helping license candidates, and that this was done with the knowledge of someone higher

up in the company. Second, someone identifying himself as U called a shift technical advisor, KK, during the examinations and asked KK for the answer to a question. Last, it was rumored among employees' wives that U used crib sheets and notes written on his hand during NRC and company-administered exams. The evidence regarding these incidents consisted of the fact that U did spend his time during the exams in question in Mr. Husted's office. He claimed to be studying there, although he had just completed the NRC exams on the two previous days. U denied having called KK to ask a question in order to cheat and denied the other cheating rumors. The Special Master did not believe U's testimony and the Board was uncertain as to U's innocence. Both reluctantly gave U the benefit of the doubt and recommended no sanctions.

WW Answering an Exam Question. WW, a shift technical advisor, received a telephone call while on duty in the shift supervisor's office during administration of the Kelly examination. The caller asked a question which WW answered. WW later discovered that his response would have been useful in partially answering one of the exam questions. WW brought this incident to light himself later in the investigation. While the Special Master concluded this was a cheating incident, the Board was not so certain. Both the Board and Special Master were concerned that this episode may mean an uncaught cheater remains on the TMI-1 staff. While the Special Master did not propose any sanction, the Board recommended that WW be admonished for carelessness and censured for his delay in reporting the information.

VV and O. VV, a prior TMI-2 Supervisor of Operations, submitted a take-home make-up exam in 1979 to help satisfy delinquent training requirements. It was discovered by the licensee that parts of the exam were in different handwriting. Upon investigating the matter at that time, Gary Miller, then TMI-2 station manager, found that VV admitted having O complete part of the make-up work for him. O was VV's subordinate at the time and claimed not to have known he was supplying answers to a take-home exam. VV was permanently removed from his operational job as a result and O was subsequently removed for cheating.

on the NRC exam. (This incident is relevant primarily in that O was also caught cheating in other instances and that it serves as the background for Miller's conduct in subsequently certifying VV for the NRC examination--discussed separately below. The incident was also at issue regarding whether or not management responded appropriately to it).

Allegations Regarding Mr. Ross. The allegations regarding Mr. Ross, TMI-1 Manager of Plant Operations, are characterized by the Board as the most serious in the proceeding, as the Board views Ross as perhaps the single most important person in TMI-1 management. Ross was accused of intentionally keeping the NRC proctor away from the exam room during the April 1981 NRC exams and of improperly influencing the answer key to allow more liberal scoring. The accusations originated with an ex-employee, YY, who informed the NRC that he had heard Ross say he had gotten the NRC to expand the answer key and that he (Ross) had kept the proctor out of the exam room for a long period of time. YY testified that he believed Ross meant that he had facilitated cheating. Two other employees testified, however, that they believed that Ross' comments were meant to describe Ross' success in making the scoring fairer and his effort to cheer up the operators. Ross denied that his actions were improper or that he intended to facilitate cheating. The Special Master on the basis of his belief in YY's testimony and disbelief in Ross' concluded that Ross was guilty. The Board disagreed. It stated that YY's accusation was based on YY's interpretation of Ross' remarks and that those remarks could be and had been interpreted differently by others. Additionally, the Board did not conclude, as had the Special Master, that the uncertainty in Ross' testimony indicated that he was being untruthful. It found this uncertainty understandable given the circumstances and Ross' tendency to limit his testimony to his definite knowledge. The Special Master also concluded that Ross improperly expanded the exam answer key for certain answers during the normal review by licensee and NRC personnel of the test while it was being taken. The Board concluded the changes that were made to the answer key were proper. The Board also concluded that no misconduct could be imputed to the licensee due to allegations against Ross.

LICENSEE'S RESPONSE TO CHEATING

Response to O's and W's Cheating and Subsequent NRC Investigation. At the beginning of I&E's investigation, licensee management wanted a GPU management official available to sit in on NRC investigator interviews of employees. The NRC investigator balked and refused. The matter was temporarily resolved by Mr. Arnold's calling Victor Stello, then Director of I&E, who directed the investigator to allow a management representative to be present during interviews. Subsequently, I&E changed its position so that later interviews of employees were not conducted with a management representative present. The licensee was accused by intervenors of improperly hindering the investigation by this action. The licensee testified that its action was intended to ensure proper treatment of its employees and to keep informed. The Special Master found this conduct improper, although he did not find that it actually constrained the investigation. The Board disagreed, believing the incident was overemphasized and that management was fulfilling what it legitimately felt at the time was its proper role. The Special Master faulted the licensee for not pursuing more vigorously the reasons why O and W cheated on the exams. While the licensee admitted in retrospect that this should have been done, and the Board agreed, the Board simply accepted this as an oversight and not as a conscious act of omission intended to conceal operator disrespect for the NRC examination.

Management's Meetings With Employees. Both the Special Master and Board discussed management's attempts to clearly communicate its position on the seriousness of cheating to its employees through a series of meetings on the subject. These meetings were also used to impart the importance of the examination process to the operators. The Board found management's actions appropriate.

Management's Response to the Shipment Incident. The Special Master faulted the licensee for not specifically asking each of the set of test-takers from which it was most likely that the questioner came, whether or not he had been the one who asked Mr. Shipman the question at

the coffee machine. The Board agreed that should have been done, but did not attribute the omission to a deliberate intent by management to not identify cheaters.

Management's Response to Rumors About U. In criticizing the management response, the Special Master pointed to instances in which the licensee admitted it did not thoroughly investigate rumors of U's misconduct, particularly a rumor regarding his being stationed outside the exam room "by someone higher up." The licensee commented that in this instance, with management involvement in cheating a direct part of the allegation, it was particularly inappropriate for GPU to investigate before the NRC did--that this was an NRC responsibility first and the licensee was at risk of being accused of interference if it investigated this allegation. The Board agreed, but did fault the licensee for not being more diligent in this area after the NRC finished its part of the investigation.

Management's Response to Cheating on Weekly Quizzes. The licensee conducted its own investigation of potential cheating on company-administered examinations by having consultants review past exams for parallelisms and by having a company attorney, Mr. Wilson, interview operators regarding specific suspicions of cheating. (Mr. Hukill also interviewed operators separately regarding the general subject of cheating.) While the consultants found examples of parallelisms on tests, in particular, on G's and H's tests, Mr. Wilson's interviews resulted in denials by both G and H which he readily accepted. The Special Master faulted Mr. Wilson's investigation of these parallelisms and found that licensee's investigation into these matters was inadequate. While the Board criticized Mr. Wilson's naivete and nonobjectivity, it imputed no adverse motive to his failures. The Board admitted that a lack of standards existed with regard to judging the adequacy of licensee's investigation, yet rated its design as passing, its execution as borderline, and its overall grade as adequate. While the Board could find specific failings with the licensee investigative effort, it found that the licensee's results were little improved on by the subsequent extensive hearings and NRC investigation.

Management Response to Cheating by VV and O in 1979. This incident raised three issues. Did licensee adequately deal with VV? With O? And did licensee properly recertify VV knowing someone else had contributed to his requalification work? Both the Special Master and Board found that the licensee probably was correct in not dealing more severely with O. In the case of VV, the Special Master criticized licensee for not dealing with him more severely. The Board disagreed. Mr. Miller, VV's immediate superior, recommended a stronger punishment than was subsequently meted out. Mr. Arnold, after considering all factors, chose to remove him from the operations career track instead. This was a result which the Board found to be consistent with its view of how organizations actually handle such problems, and hence, the Board found it an acceptable response.

The certification, subsequent to this episode, of VV to the NRC by Mr. Miller, led to concern that Miller so certified despite knowing that VV had met his requalification requirements through cheating. By certifying VV, Miller was stating that VV had satisfactorily met the requalification program requirements of Appendix A to 10 CFR Part 55. At issue is whether or not he knowingly made a material false statement by certifying that VV had passed a particular section with a grade of 89.1%, when he, Miller, knew that O had contributed material which resulted in that score. The Board found that additional investigation was warranted. As other members of management, including Mr. Herbein, were involved in the certification decision, the Board believed they also should be involved in any reinvestigation of this certification matter. Additionally, the Board imposed a license condition requiring that any involvement by Miller in TMI-1 startup activities or operation be done under the direct supervision of an appropriately qualified licensee official.

THE TRAINING AND TESTING PROGRAM

Additional training and testing requirements were levied on TMI-1 by the Commission's Orders of August 9, 1979 and March 6, 1980. The Board, in its August 27, 1981 PID on management issues, found that the licensee's

efforts in improving its training program satisfied the Commission's concerns. The Board had foreseen that results from the cheating proceeding might have implications for that earlier finding of the Board and had asked the Special Master to look into this area.

The proceeding on cheating produced a number of examples of failings in the actual implementation of the training and testing program. For example, weekly quizzes were often not proctored, cooperation was apparently permitted on some company quizzes, confusing operators as to what was or was not permissible. It appeared that memorization was overly emphasized in teaching--in lieu of imparting understanding of concepts. Take-home exams and weekly quizzes were sometimes assigned without clearly stating whether they should be open or- closed book.

The Special Master analyzed both the training program administration and its actual content. His conclusion was that it was inadequate to meet the Commission's Order. The Board disagreed with this conclusion. However, the Board believed the doubts raised by the evidence in the reopened proceeding impacted their earlier finding. While the program design was found to be adequate, the Board stated that evidence on program delivery indicated inadequate quality control of the training program. Given that the operators had subsequently done well on the October 1981 NRC exams, the Board found that the program was still adequate, subject to additional quality assurance measures to be satisfied during the first two years after restart. These measures would include an in-depth audit of the testing and training program by the NRC staff, additional criteria for training instructors, a licensee internal audit procedure, and procedures for sampling answers on company exams to detect cheating.

The Board did not believe additional training or testing of operators would be a constructive remedy. Since the operators had passed all of the hurdles placed before them over the past two years, the Board felt that no further demonstration of their competence was necessary.

CERTIFICATION OF CANDIDATES FOR NRC LICENSING

The cheating proceeding raised questions regarding the acceptability of licensee's program for determining whether candidates are qualified to sit for the NRC exam. The Special Master found it adequate despite some criticisms. The certification procedure was determined to be too informal. The licensee recognized the problems and the consequences of its actions and was instituting voluntary changes to make the procedure more formal and reliable. The Board accepted such steps as an important safeguard against a recurrence of such an event as the licensee certifying individuals such as O and W, and considered this an acceptable response to criticisms of past certification problems.

ISSUES INVOLVING THE NRC

NRC Examination. The Special Master and Board found the administration of the April 1981 NRC exams lax and inadequate. As a result of the April 1981 cheating, new procedures were instituted to improve proctoring of NRC exams and to sample exams for evidence of cheating as a standard procedure. Even so, the Special Master and Board still had reservations regarding the test procedures and test content. The Board concluded that the degree of emphasis on memorization should be additionally examined. Also, the Board found that the review process, whereby the licensee provides a "quality control" check on the NRC to ensure accuracy of the exam, can result in lack of credibility of the exam and potentially inaccurate questions. The Board recommended that the Commission encourage improving the process as a generic matter.

Staff's Response to Cheating. The Special Master and Board had specific criticisms of various aspects of the staff's investigations. However, the Board found the staff response adequate. The Board was particularly critical of the staff for informing all parties that it did not intend to place any special attention on auditing the licensee's training and testing program, despite the problems identified in the proceeding. The staff would have relied solely on the results of the NRC exam as a

measure of adequacy of the licensee's training program. As a result, the Board imposed a condition requiring such an audit by the staff.

Attachment:

As Stated

Attachment to Enclosure 1

Issue	Special Master			Board		
	Finding	Sanction Recommended	Basis	Finding	Sanction Recommended	Basis
<u>Individual Cheating</u>						
1. O & W - copying on NRC and other exams	guilty	criminal prosecution	confession	guilty	none (licensee fired O & W)	confession
2. G & H - copying on company quizzes	guilty	prohibited from operating TMI-1	analysis of quizzes and lack of explanation	guilty	2 weeks suspension - licensee and G & H accept Board penalty	analysis of quizzes and lack of explanation
3. S & Y - copying on quizzes	not guilty	none	comparison of answers to training materials	not guilty	none	comparison of answers to training materials
4. GG, W, MM - copying on quizzes	GG & W - yes MM - no	none - as W and GG one instance only	analysis of answers and testimony	GG - yes MM - maybe	none	analysis testimony
5. Mr. Shipman - giving answer at coffee mess	guilty of not informing	prohibited from operating TMI-1	disbelief of testimony based on demeanor	not sure	none (licensee reprimanded Mr. Shipman)	judgment
6. P & Mr. Husted	Husted guilty	none	judgment of testimony	Husted not guilty	N/A	judgment of testimony
7. U - helping others	probably guilty	none	rumors, testimony	not guilty	none	rumors, testimony
8. WW - answering an exam question	guilty	none	confession	guilty	admonishment	confession
9. VV & O - O did VV's work on homework	guilty	none	testimony, other evidence	guilty	none both removed by licensee	testimony

Issue	Special Master			Board		
	Finding	Sanction Recommended	Basis	Finding	Sanction Recommended	Basis
Individual Cheating (continued)						
10. Mr. Ross expanding answer key - distracting proctors	guilty	licensee condemnation	YY accusation, not guilty Ross demeanor	none	none	testimony
11. Miller - certify VV falsely	guilty	licensee condemnation	written evidence and testimony	guilty	Miller to be supervised, investigated	evidence and testimony
Management Issues						
1. Management involvement in cheating	yes	adverse finding to restart	overall conclusion	no	none	different reading of evidence
2. Management's response to cheating	inadequate	none	overall conclusion	adequate	none	overall conclusion
3. Licensee's investigations	inadequate	none	overall conclusion	marginally adequate	none	overall conclusion
4. Training program	inadequate	adverse finding to restart	overall conclusion	adequate	2-year probation, improve QA of training	overall conclusion
5. Certification of operators	inadequate	none	case of VV	inadequate	none - accepted licensee improvements	judgment, case of VV
NRC's Performance						
1. Administration of exams	inadequate	none	N/A	lax	generic review	N/A
2. Content of exams	inadequate	none	N/A	problematic	generic review	N/A
3. Exam review	inadequate	none	N/A	problematic	generic review	N/A
4. Adequacy of investigation	uneven	none	N/A	adequate	none	

ENCLOSURE 2

Rel

SUMMARY OF BOARD'S RESPONSE TO STAFF ENFORCEMENT PLAN

General

In its December 14, 1981 Partial Initial Decision (PID) on plant design and unit separation, the Board explained that, throughout the PID, references were made to the Board's reliance on various Staff requirements, licensee commitments and Board-imposed conditions without studied regard to whether these terms were intended to be conditions or legally binding technical specifications attached to the TMI-1 licensee. The Board directed the Staff to present a plan identifying which of these it would impose as technical specifications or other forms of license conditions. The Board also directed the Staff to report how it intended to be assured that the licensee would either abide by any the Staff did not impose as license conditions or seek relief in an appropriate manner.

On February 1, 1982, the Staff filed the requested plan with the Board.

The Staff plan addressed:

- (1) Commitments/requirements to be completed prior to restart.
- (2) License conditions/technical specifications to be imposed at restart.
- (3) NUREG-0737 items.
- (4) Method of assuring compliance with items that are not license conditions.

- (5) Reactor vessel water level instrumentation.
- (6) Ground water monitoring.
- (7) Systems interaction studies.

In its reply of February 22, 1982, the licensee challenged some aspects of the plan. On February 17, 1982, the Union of Concerned Scientists (UCS), the only other party to reply, criticized the Board's approach to enforcement and faulted some aspects of the Staff's plan as being vague and inconsistent with the December 14, 1981 PID. On March 10, 1982, the Staff, by leave of the Board, filed a response to the licensee's position. The Staff reported that it and the licensee were now in agreement on most of the disputed areas. The Board responded to the UCS and licensee comments in its April 5, 1982 "Memorandum and Order Modifying and Approving NRC Staff's Plan of Implementation."

Board Findings

The Board found that the Staff report was generally sufficient, but that some modifications and additions were necessary:

- (1) The Board reiterated its requirement that, prior to restart, the licensee demonstrate progress in initiating a long-term solution to the steam generator bypass logic problem (possibility of feedwater isolation due to failure in the rupture detection system).
- (2) The Board accepted staff rewording in response to licensee comments of a proposed license condition on correction of control room deficiencies. Four items--two related to Bailey controllers, one to detection of burned-out indicator bulbs, and one related to in-plant communications--are now to be addressed in the licensee's detailed control room design review report for TMI-1.

- (3) The Board accepted rewording of the proposed license condition on suspension of work in the Unit 1 area of the fuel handling building whenever Unit 2 fuel is being moved. The original Staff proposal reflected both the language and the intent of the Board's December 14, 1981 PID, in that it would have required an absolute bar to any work in the Unit 1 area during Unit 2 fuel movements. In response to licensee comments, the Board stated it now agreed that the record did not require such a complete bar. The Board modified the proposed license condition to require suspension of work in the Unit 1 area of the fuel handling building during any Unit 2 fuel movements unless the licensee submitted for Staff review the procedures for fuel movements and evaluation of the potential impact of fuel movements, and the Staff agreed that work in the Unit 1 area of the fuel handling building could proceed.
- (4) The Board accepted licensee rewording of a proposed license condition concerning the engineered safety features (ESF) filtration system for the Unit 1 fuel handling building. The reworded condition requires that the licensee, prior to movement of irradiated fuel within the Unit 1 fuel handling building, have an operable ESF filtration system for the Unit 1 fuel handling building and assure system operability whenever irradiated fuel is being moved.
- (5) The Board modified the Staff proposal concerning enforcement of items that are not being made license conditions. The Staff had stated that "the normal enforcement procedures relied on by the Staff to assure compliance by all licensees with items not specifically addressed in Technical Specifications or license conditions will be relied on by the Staff to assure that the licensee for TMI-1 operates TMI-1 safely." To this the Board added: "unless otherwise required by the initial decision." The Board stated that although it was not aware of any special verification required to be performed outside the subject matter

covered by license conditions, the modification was a precaution against any oversight.

ENCLOSURE 3

TMI-1 RESTART COMMISSION REVIEW DOCUMENTATION

Licensing Board Documents

1. Part 1 Initial Decision of August 27, 1981 (Management Issues)
2. Partial Initial Decision of December 14, 1981 (Hardware, Separation, and Emergency Planning)
3. Board Memorandum and Order of April 5, 1982 Modifying and Approving NRC Staff's Plan of Implementation.
4. Partial Initial Decision of July 27, 1982 (Reopened Proceeding).

OPE Memoranda

1. OPE memo to Commission of August 7, 1981, re: TMI Restart Proceeding: Appellate Review of Merits of Board Initial Decisions
2. OPE memo to Commission of September 24, 1981, re: OPE Review of Partial Initial Decision on TMI-1 Restart (Management Issues)
3. OPE memo to Commission of October 9, 1981, re: Follow-up to October 6 Commission meeting on TMI-1 Management Issues
4. OPE memo to Commission of November 3, 1981, re: TMI-1 Restart -- Management Competence
5. OPE memo to Commission of December 18, 1981, re: TMI-1 Restart -- Vessel Level Instrumentation
6. OPE memo to Commission of December 22, 1981, re: TMI-1 Shift Staffing
7. OPE memo to Commission of December 22, 1981, re: TMI-1 Restart Hearings on Cheating
8. OPE memo to Commission of January 8, 1982, re: OPE Analysis of December 14, 1981 Partial Initial Decision on TMI-1 Restart: Hardware, Separation of Units 1 and 2, and Emergency Planning Issues
9. OPE/OGC Memo to Commission of March 1, 1982, re: TMI-1 Restart: Analysis of Parties' Comments and Decision-Making Options