UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSIONERS:

Chairman Nunzio Palladino
Victor Gilinsky
John Ahearne
Thomas Roberts
James Asselstine

In the Matter of METROPOLITAN EDISON COMPANY (Three Mile Island Nuclear Generating Station, Unit 1)	Docket 50-289 SP

AAMODT COMMENTS CONCERNING NRC STAFF REVIEW OF GPU v. B&W COURT TRIAL TRANSCRIPT AND MOTIONS TO REOPEN RECORD OF RESTART PROCEEDING

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I. INTRODUCTION

March 16, 1983, the Commission provided that interested parties to the TMI-1 Restart Proceeding might comment in writing to the Commission on the NRC Staff Review of the transcript record of the General Public Utilities versus Babcock and Wilcox lawsuit, here after GPU v. B&W.

We call attention of the Commission to the voluminous and highly technical nature of the record, constraints which preclude a complete evaluation of the Staff's review of the record in the designated time frame of fifteen days. Nevertheless, we were able to demonstrate

(1) that the record, contrary to the Staff's assertion, does contain new material relative to the Restart Proceeding which challenges the Licensing Board's conclusions that GPU Nuclear management integrity is adequate to the task of safe operation of TMI-1. This material is so significant, in and of itself, that a fair consideration of it, by a reopening of the Restart Proceeding, would inevitably lead to a denial of the license of GPU Nuclear to restart the TMI-1 plant;

(2) that the record provides a base, not apparent to the reviewers, for the possible resolution of identified inadequacies in operator training, a matter inappropriately resolved by the Licensing Board's recommendations;

(3) that the Staff Review with regard to the NRC's understanding of the TMI-2 accident failed to draw a most significant conclusion with regard to the failure of operators to timely recognize that the open PORV was causative; and

(4) that the Staff's review methodology was not only deficient, but deliberately deficient, in order to conceal new

and significant information.

These are serious allegations which we do not make lightly. We have not been able to examine the entire Court Trial transcript; in fact, we have not examined most of it. We have, however, devoted our time over the ten days since the NRC Staff Review arrived to the task of assessing the Staff's review of those portions which we have read and studied thoroughly. Unlike the Staff reviewers, we are intimately familiar with the Restart Proceeding record, having participated actively in nearly all phases since September 1979. Unlike the Staff reviewers, we have provided citations for most of our references. We are dismayed that our comments will be filtered through the Office of General Council since "it does not have anyone at the Commission level thoroughly conversant with the accident record and the investigations." (Briefing, April 6, 1983,p. 82,85). We would trust that the Commissioners would take the time to personally read our comments with the same regard as we did their invitation to participate in the Restart Proceeding and to comment on the Staff's Review.

II. SUMMARY

The Staff review of GPU v. B&W was incomplete. It was wholly biased in the areas reviewed toward GPU interests. It failed to acknowledge significant information and significant new information, which if received as evidence by reopening the record of the Restart Proceeding, would challenge the Licensing Board's recommendation for restart of Unit 1.

The most significant information examined in GPU v. B&W that was not examined in the Restart Proceeding is the Hartman allegation that operators at Unit 1 deliberately falsified leak

rates to keep the plant open. GPU management directed this deception and violation of NRC procedures.

The quality of the TMI operators' testimony has been markely conflicting and inconsistent throughout all proceedings concerned with management issues, including GPU v. B&W. In the latter proceeding, operators changed their testimony concerning events which happened nearly four years ago. Recent affidavits of engineers at TMI-2 allege that management used intimidation to control the flow of information from on-site personnel.

Information concerning B&W's proprietary codes and unexcelled expertise provided a base for the possible resolution of training deficiencies and an invalid licensing process, acknowledged by the Licensing Board in their decision on restart. B&W, the vendor of the TMI plants, should have a responsible role in training and certification of operators and should be the source for material used in constructing and grading the licensing exams.

Concerning the capabilities of the operators to handle emergencies, Robert Arnold, president of GPU Nuclear, contradicted the Licensing Board's findings of adequacy. Arnold's testimony indicated the need for an offsite decision center where experts view plant data and advise the operators.

Four motions are included: (1) to have the record of the Restart Proceeding opened to receive information revealed in GPU v. B&W in order to reevaluate GPU Nuclear management capability and integrity; (2) for further review of GPU v. B&W; (3) for provision of a 1980 GPU report on the Hartman matter, not served in the Reopened Hearing on cheating; and (4) for obtaining from the Department of Justice the record of a motion concerning

allegations of inappropriate influence on the operators' testimony by GPU attorneys.

III. DISCUSSION

1. New/significant Information

The Hartman Matter. The Hartman testimony is significant new information. It is significant to the investigations of the TMI-2 accident and the TMI-1 Restart Proceeding. It is also "new", not on the record of those proceedings, although the NRC has been aware of the Hartman allegations since May 1979. At that time NRC deposed Hartman, referred the case to the United States Department of Justice, and discontinued their own investigation. The NRC has withheld the Hartman deposition from public view. The Hartman case has languished in the DOJ for nearly four years. All DOJ investigations are conducted in secret; even the status and case number cannot be disclosed to the public according to Federal Attorney Jim West who is in charge of the case. Hartman, however, would have been free to testify in other proceedings, if requested. The GPU v. B&W brought the Hartman information into public view for the first time.

The Staff is clearly at fault for recommending restart of TMI-1 before the Hartman matter has been resolved. The Staff once considered CLI-3-80, Item 10 pendant on the resolution of the DOJ investigation. (NUREG-0680, Supp. 1, p. 36,37). Then, four months later, without further explanation, the Staff described the matter as only of "historical interest". (NUREG-0680, Supp. 2, p. 10). The GPU v. B&W transcript shatters the Staff's obvious attempt to coverup the Hartman matter.

Hartman testified (GPU v. B&W, Tr. 7008-7995)[1] that reports

[1] All quotes which follow were taken from GPU's cross-questioning of Hartman and appear at Tr. 7025-7090.

to the NRC concerning leak rates at TMI-2 were falsified for a period of three months prior to the TMI-2 accident. Technical specifications for TMI-2 allowed a leak rate of one gallon per minute, however all tests which Hartman took during that period -- which numbered between 50 and 100 -- yielded leak rates in excess of technical specification. Hartman testified that "all readings above specifications were discarded into the wastepaper basket", "When it got down to getting close to 72 hours (the period between each report), they wanted a good leak rate, so we got them one."

Hartman or other operators would add hydrogen or water to the system to obtain a false low reading. Hartman described his actions as "sneak(ing) a little gas into the makeup tank." Hartman stated that "everyone knew we were doing this", specifically naming his shift supervisor and foreman, Dick Hoyt and Bernie Smith.

Although GPU's attorney attempted to disparage Hartman's testimony by implying that those who added hydrogen or water may not have known the significance of their actions, Hartman was firm in asserting that he was aware that the additions did not reduce leakage but only made it appear that leak rates were lower than they actually were. GPU's attorney attempted to characterize Hartman's allegations concerning the addition of water as "hearsay" since Hartman had claimed he only had added hydrogen. Hartman countered by describing his observation of Ray Booher, another operator, who "fluttered" water into the makeup tank, a procedure which had no other purpose than to conceal the loss of water from the reactor. Further, Hartman testified that he recognized that the reactor was being operated in violation of technical specifications and that it should have been shut down

and the valve (PORV) repaired.

Hartman was told by his shift foreman, "Make sure you destroy these sheets (the tests in excess of allowable leak rate); we don't want them lying around."

The significance of the Hartman information to the TMI-1 restart proceeding is readily apparent. The decision to falsify leak rates was made by management. It is not unlikely that Robert Arnold, now president of GPU Nuclear, was cognizant of the matter since the overriding reason for such a decision could only have been to keep the plant on line to avoid purchase of replacement electricity while TMI-1 was down for refueling. B&W's attorney made such an assertion in his presentation to the court. (GPU v. B&W, Tr. 113,114). The Hartman testimony is clear evidence of the lack of integrity of GPU management, an important issue of the Reopened Proceeding which was concerned with management involvement or influence on the "cheating" behavior of operators. The Licensing Board came to an opposite conclusion on the basis of a lack of evidence. The Hartman information was not in evidence; if it were, it could have been deduced that the character and day-to-day operations performance of TMI management was such as to have encouraged or even instructed the operators to cheat on tests in order to obtain their NRC licenses.

TMI-1 could not start without a sufficient complement of licensed operators. Management had the identical motivation to facilitate the operators' cheating as they did to direct the operators' falsification of leak rates: avoidance of the costs of replacement power. The operators had less motivation to cheat of their own volition; they were retained despite repeated failure on exams while if they cheated and were caught, they could lose

their jobs. An assumption that management encouraged and approved of cheating would explain why Robert Arnold did not ask the operators who cheated extensively why they cheated or why answers to examination questions were solicited, unabashedly, over the loud speaker system. (Tr. Nov. 12, 1981; Staff Ex. 27, Enclosure 10).

The Hartman information, including the court trial testimony and all depositions, needs to be incorporated into the record of the Restart Proceeding.[2]

1978 TMI In-house Management Audit. The Staff reviewers were interested at first in knowing the date of the first public disclosure of this audit; however when they learned that GPU had withheld this safety-related information until it was presented as B&W's exhibit in the court trial, the Staff failed to pursue what amounted to a violation of NRC regulation. The NRC requires all safety-related information to be reported promptly; the audit identified important safety-related deficiencies.

Some of the deficiencies in training are discussed in the transcript at p. 1689-1699 where it was noted that "Training in the Operations Department is at the present time a serious matter" with attendance hovering about 40%. The audit (B&W Ex. 843) stated that the quality of the operations personnel was in a continuous downhill trend due to lack of training.

This information is clearly new and exceedingly germane to

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[2] Judge Milhollin sustained GPU's objection to our motion to have the Court subpeona Hartman. GPU's stated objection was that we had not included Hartman in our trial plan. We were dissuaded by a lawyer who was representing us at that time and who assured us that TMIA intended to pursue the matter vigorously.

to the investigations of the accident, which found inadequate training contributory to the accident, and to the Restart Proceeding as it relates to wilfull negligence on the part of management who failed to remedy attendance in the training program and withheld this information from the Restart Proceeding. An operator who testified in the Restart Proceeding (on cheating) suggested a simple remedy that would separate off-time shift from the training shift in order to discourage operators from extending their vacations through the training week. Neither this remedy or the obvious remedy -- manadatory attendance in training were taken in 1978 or to the present time. Although GPU's attorney stipulated an exhibit which he believed represented the numbers of hours the operators spent in training in 1980 - 1981, we believed that the presentation was misrepresented. (March 1, 1982, Aamodt Findings, para. 363-365).

Court Chastisement of Robert Arnold for Misleading Testimony. In GPU v. B&W, the Court found the testimony of Robert Arnold, president of GPU Nuclear, less than forthright. The judge, comparing Arnold's responses to B&W attorney's cross-questioning to Arnold's prior testimony concerning the training program at TMI, snapped, "The Court finds that (prior testimony) misleading." (Tr. 1741). Arnold was acknowledging in his responses to B&W that a 1978 in-house audit had revealed low attendance (44%) in the training program and problems in the training department described as "a serious matter". Arnold acknowledged that he was not aware of any address of these problems. (Tr. 1690-1699). The Court scolded Arnold for having described the training situation as "all hunky-dory". (Tr. 1741).

Judge Milhollin (in the Reopened Hearing on cheating) also noted Arnold's lack of forthrightness, disbelieving Arnold's statement that he had not asked the operators why they cheated because that information was not critical to the prevention of cheating in the future. Judge Milhollin concluded that Arnold had not asked because he already knew why the operators cheated. Judge Milhollin's conclusion, not adopted by the Licensing Board, is given greater weight by GPU v. B&W.

B&W objected to the evasive manner in which Arnold answered their questions, and the Court sustained noting, "We don't need a speech here." (Tr. 1555). During the Restart Proceeding, this kind of evasive response through unnecessary elaboration was used throughout the Restart Proceeding by glib management officials. The Licensing Board did not object and allowed the hearing to be unnecessarily prolonged by this legal manuevering of GPU.

B&W - GPU Interface Concerning Plant Procedures.

Information presented in the court trial by GPU's attorney could be expected to lead to a more adequate resolution of deficiencies in training of TMI-1 operators than provided by the Licensing Board from the record of the Restart Proceeding.

GPU and B&W agreed (Tr. 4-186) [3] that B&W's technical resources, that are needed to achieve adequate training of the operators, are superior to GPU's. B&W holds in their computers the proprietary codes which describe the TMI reactors' operating characteristics (to which neither GPU nor NRC has access), B&W

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[3] Introductory presentations of GPU and B&W.

technical personnel have thermodynamics expertise unequaled by GPU personnel, and B&W has access and capability to analyze transients at B&W plants throughout the industry.

B&W attempts to provide pertinent new information to the utilities. However, in the case of the Davis-Besse incident, a precursor of the TMI-2 accident, the information failed to reach the training department or the operators although it was presented to TMI management through a quarterly industry meeting. B&W made the point that TMI had three similar incidents of their own prior to the accident, yet they had not even recognized the significance of these incidents or the relationship to the Davis-Besse incident. (Tr. 185-186).

Arnold testified that GPU had "very limited capability in the absence of codes to do the kinds of transient analysis that only B&W was capable of providing." (Tr. 1561).

B&W asserted that 90% of the GPU training program for operators at TMI was completely ineffective. "Met Ed didn't teach the operators the fundamentals of an overcooling transient based on those very (three) incidents at their own plant." (Tr. 155). B&W described the limited technical capabilities of the supervisor of training who did not have an NRC license and who failed an NRC licensing exam after studying under the instructors he supervised. The supervisor did not understand heatup/cooldown curves, applicable to every operating procedure. (Tr. 129-130). Only 20 hours annually were reserved for each operator for on-hands experience at the B&W simulator -- just 10% of the training schedule -- because GPU "did not want to pay very much for the simulator training." (Tr. 125).

B&W could just as well have been describing the training

situation at TMI as it was revealed in the Restart Proceeding. The instructors have remained. The operators attempt to understand reactor theory through consensus of their opinions although "bootstrapping" is hardly a valid educational method when operators and instructors have little or no formal education beyond high school. (Tr. 25,696; 26,462; 26566). The amount of simulator training for licensed operators is presently the same number of hours as were scheduled before the accident. One-half of the senior operators failed the second licensing exam given in 1981, and there was still considerable doubt about the operators' understanding of when they should terminate the HPI pumps.

The Licensing Board's recommendations (Decision, August 27, 1981, para. 2421) for improving training -- application of quality assurance/control techniques -- fails to come to grips with the root of the problem: GPU's lack of resources. B&W, on the other hand, has the resources to appropriately train the operators. GPU v. B&W made that eminently clear: GPU ascribed the ultimate responsibility for technical understanding of plant performance to B&W.

In order to know all of the information that is needed to operate the plant safely, the proprietary information, uniquely held by B&W, must be incorporated into the training and testing program. In light of the proprietary nature of the information, B&W must participate in the operator training and certification programs. The most appropriate independent agency to certify the performance of the operators is the company that manufactured the equipment, whose reputation is at risk.

The NRC Examiners who construct, administer and grade the licensing exams have even fewer resources than GPU. The examiners went to the operators and instructors at TMI for the information from which they constructed and graded their tests. Judge Milhollin questioned the validity of these tests of the TMI-1 operators (Special Master's Report, para. 235,340), however the Licensing Board set aside these concerns and believed that the licensing process was adequate until NRC had time to improve their tests. (Decision, July 27, 1982, para. 2362-2372). The obvious solution becomes apparent from the GPU v. B&W transcript. NRC should obtain the subject matter for the TMI licensing exams from B&W. B&W is the repository of all pertinent operating information specific to the TMI plants. Only B&W knows what questions to ask and what are the right answers to assure safe operation of the TMI-1 plant.

Operator Capability for Handling Emergencies. The GPU v. B&W transcript calls into question the Board's decision that the operators were able to handle emergencies with no undue risk to the public. (Tr. 33,65,79,80). GPU's attorney alleged that only an experienced thermal hydrologist like Dr. Dunn of B&W could have figured out what to do during the TMI-2 accident. Contrary to the Licensing Board's findings in the Restart Proceeding (Decision, August 17, 1981, para. 265,266) GPU asserted that environmental stressors in the control room -- "many indications, some of them indirect, some malfunctioning, hundreds of lights on and numerous other signals" -- reduced the operators' capabilities to the extent that problem-solving was impossible.

The only appropriate resolution of the uncertainty of appropriate operator response during an emergency is provision of off-site decision centers manned by nuclear experts where all pertinent data is displayed. NRC has proposed decision centers for the future, however GPU's assertions in the court trial are evidence that TMI-1 should not be allowed to restart without the backup of a decision center. Since B&W has proprietary plant information and unique technical expertise critical to understanding performance of the TMI-1 plant, B&W experts should be utilized for decision making. In fact, the jaded operating history of B&W plants (Tr. 22, 23) should have spurred such a provision by B&W management.

There can be no viable argument against providing remote readout capability. All significant readout instruments in the control room already have the capability to be tapped for data transmission purposes. Transmission is simple and relatively inexpensive.

2. New Understanding of TMI-2 Accident

The Hartman testimony may have provided an answer to a critical question remaining from the investigations of the TMI-2 accident. There has been no satisfactory explanation of why the operators failed to realize that water was coming out of the PORV at a rate so high as to foil all attempts to stablize the reactor. Indeed, the PORV had been stuck open over two hours, uncovering a significant portion of the core, before Brian Mehler closed the block valve. It should be noted that Mehler concluded that the PORV was "leaking". (NUREG/CR-1250, p. 19). It should also be noted that Frederick offered a somewhat different interpretation

of why (the block valve was closed): "Because noone could think of anything else to do." (Id.). These apparently contradictory statements become conciliatory when viewed in the light of Hartman's testimony. For three months the operators had operated the plant routinely with the knowledge they had falsified data to hide the fact (from the NRC) that the valve was leaking. They had observed temperatures at the PORV during "normal" operation similar to those observed during the accident. They were conditioned to ignore the potentially devasting role the stuck-open PORV was to play on March 28, 1979. Here was "mindset", established by management.

Much as been made about the misleading indicator at TMI-2 which signaled that the PORV was closed. However, the operators were wary of signal light problems and were accustomed to checking through other indicators. One such indication was elevated relief valve discharge temperatures. Zewe attributed these to the fact that "the PORV had been leaking anyway." (Id. p. 17) that he had "seen higher readings than these under reasonably normal circumstances." (Id.) The operators' disregard of another indicator, nnoticed by three operators at 4:30 a.m., water pouring into the sump (Tr. 140), most probably resulted from an attitude of disconcern about a leaking PORV which they no longer took seriously.

At 4:14 a.m., with the accident barely starting, the operators noted an increase in the reactor coolant drain tank pressure and at about 4:20 a.m. Zewe noted failure of the rupture disc. At 4:38 a.m. Zewe and Frederich were aware that overflow from the drain tank was collecting on the containment building floor. Yet noone closed the block valve. One could

conclude that had the operators not been conditioned to live with the leaking PORV, they would have closed the block valve promptly and there would have been no accident.

3. The Staff's Review

The material we found in the GPU v. B&W transcript, in the few days that we had to devote to the task of reading it, demonstrate that the Staff's Review, to which four investigators devoted ten weeks, can only be a blatant attempt to cover and distort.

The Staff has a vested interest to protect -- their positions of complete support of GPU management and quick restart of the TMI-1 reactor -- and their review represents no more than that. The Staff was too buried in the conclusions of prior studies to acknowledge that anything revealed in the GPU v. B&W transcript was significant. They included no citations to the transcript; all references were to prior investigations.

The quality of the Staff's review cannot be dismissed as being too blind to see the 'forest because of the trees'. That would be nonsense. The reviewers were intimately familiar with the details of the TMI-2 accident investigations, in fact they were chosen because of this knowledge. (Briefing, April 6, 1983). Since the issues of the Restart Proceeding were only those with nexus to the TMI-2 accident, the matters of the TMI-2 accident and the issues of the Restart Hearing are inextricately entwined. Commissioner Ahearne so noted at the briefing. (Id., p. 10). The director of the review, Victor Stello, as Director of Inspection and Enforcement, was involved personally in both hearings of the Restart Proceeding.

Stello's pleas of innocence, when the Commissioners criticized

the shallowness of the review, is too familiar to those who have participated in the restart hearings. Two notable past protestations were that GPU management could "knowingly" misinform the Commonwealth of Pennsylvania about the severity of the TMI-2 accident without wilfully" misinforming them. and that Stello did not know that NRC had the right to exclude management from investigative interviews with operators. (Tr. 25,428-30).

Commissioner Gilinsky questioned the possible bias of the reviewers toward GPU. Concerning the dispute with B&W about the initiation of the HPI pumps at 5:41 on the morning of the accident, Gilinsky stated, "I am surprised that your conclusion is as firm as it is in view of the uncertainties." (Briefing, p. 65). Stello admitted that he "did not independently do a calculation to confirm that that (GPU's point of view) was the case..." because he did not consider the dispute significant enough. (Id., p. 38,46). Stello's excuse, hardly appropriate for a seasoned investigator, was that the issue was not important enough to warrant the time required to make the calculations. (Id., p. 66, 67).

In view of the Staff's evaluation of the significance of the HPI issue and the purpose of the review of the GPU v. B&W transcript -- to apprise the Commission of significant information that could affect their decision on restart --, the Staff's emphasis of the HPI dispute in their review and briefing can hardly be justified. The HPI issue is, however, important to GPU in their lawsuit against the United States, which is presently in appeal. The reviewers have, without thorough independent

analysis and for no purpose important to the review, adopted GPU's position!

Stello considered his review of the HPI issue to be thorough (Id., 38,46), however the Staff failed to examine B&W exhibits that were prepared for the trial but not presented because of the out-of-court settlement. (Staff Review, Appendix A). Stello's excuse was that, because of voluminousness of the exhibits that were prepared but not presented, he was awaiting the Commission's order to review them. (Id., 27). This excuse is particularly shallow since ensuing Commission discussion concerning the institution of the Staff review clearly indicated that the Commission had intended a full review. (Id., p. 82). The NRC Staff presented a parallel excuse in the Reopened Hearing concerning I&E's investigation of cheating at TMI-1 which the Commission had also ordered to be a "full investigation". (Tr. 24,279-81; 25,428; 25425).

There are 1767 exhibits and 81 depositions which were prepared for the trial and less than a third of this number were entered into the transcript of the trial court record. Robert Arnold has sorted the remaining document into two piles and made one, containing 580 documents "which may contain something of interest", available to NRC. (Staff Review, Appendix A). Arnold's stated concern, that the transcript and related exhibits did not contain all germane information, is thinly guised, therefore his judgment concerning relevancy of the documents cannot be trusted.

The NRC reviewers did not examine the remaining documents, not entered in the court trial. They all need to be reviewed and made available to all parties. B&W did not complete its

presentation in the trial due to settlement with GPU so that the unentered B&W exhibits are likely to contain information of significance.

The Staff failed to note that GPU's investigation in 1980 of the Hartman matter should have been provided to the parties of the Reopened Hearing on cheating. Judge Milhollin ruled that GPU must provide all records subsequent to the TMI-2 accident concerning cheating of any kind. The report should be provided now to all parties. GPU's violation of a court order to provide all documents is also a matter of interest to the Commission and the parties.

The Staff Review is totally in error in stating that the Hartman matter "was also the subject of a Licensing Board decision." (Id., p. 18) The Licensing Board clearly stated that they did not consider the Hartman matter (Decision, August 27, 1981, para. 504, 505).

The entire treatment of the Hartman matter including the failure of the Staff to fully brief the Commission concerning the exposure of the Hartman information in the GPU v. B&W transcript is completely baffling. We cannot understand why the matter was not fully aired in the Restart Proceeding. The matter was highly relevant. According to Jim West, the federal attorney in charge of the Harrisburg office, the Justice Department would not have discouraged or prevented Hartman from appearing in any other trial.

The standards of the Justice Department are not those of an administrative hearing so that failure of the DOJ to indict cannot be assumed to resolve the issue of relevancy of the Hartman matter to the Restart Proceeding. DOJ must find evidence

of criminality and which is beyond all reasonable doubt to indict. The Commission's decision on restart (and the decisions of the Licensing Board and Judge Milhollin) are concerned with a broader range of issues, many related to the Hartman matter, and are determined on the weight of the evidence.

We would expect that the Hartman allegations will result in indictments of GPU management unless the manuevering of GPU's attorneys can prevent corroborative testimony. Robert Arnold 'forgot', reporting on the status of the DOJ investigation (Briefing, p. 24-26), to tell the Commission that the investigation was suspended to consider allegations of improper interference on the operators' testimony by GPU's attorneys.

The Staff reviewers failed to see the possibility of improper GPU influence in the operators' changes in testimony concerning the initiation of the HPI pumps. (Staff Review, p. 5,6). The operators were appearing as GPU's witnesses and the changes in the operators' testimony were important to the success of GPU's case.

Recently breaking information, not part of the court trial, but referenced in the Staff Review (p. 21) provides evidence that GPU management has attempted to manipulate employees through threats and innuendoes. Three personnel involved in the clean-up operations at TMI-2 alleged that management reaching to Robert Arnold threatened them for reporting violations to the NRC. Richard D. Parks, a Bechtel engineer, in an affidavit prepared last month, stated that Site Operations Director Larry King and Director of Plant Engineering Edward Gischel were threatened by John Barton, Deputy Unit 2 Director. King's and Gischel's jobs were threatened in a telephone call from Barton, allegedly because

they would not 'sign-off' (approve) the Safety Evaluation Report for the polar crane. Parks claimed that the SER had been submitted to the NRC without reviews required by Technical Specifications. Gischel had written a memo describing their concerns about the refurbishing of the polar crane which Barton wanted to keep from NRC view. Parks also alleged that he was warned by Rick Gallagher, Assistant Director of Site Engineering, that Edward Kitler, Superintendent of Startup and Test, had requested upper-management to transfer Parks off-site. Jim Theising, Manager of Recovery Programs, threatened Parks, when he refused to approve an order which circumvented the entire QA/QC review, with the news that a memo had been issued to relieve Parks of his job. Subsequently, Larry King was suspended by Barton, presumably at the behest of Robert Arnold, on the pretext that King had conflict of interest. Parks, and King's secretary, were prevented from retrieving King's personal belongings by a guard and an unidentified individual in street clothes. Gischel, who had suffered a stroke some time beforehand, was ordered to have a psychiatric exam through the company medical offices. King's secretary Joyce Wenger was accused of stealing a memo, suspended and subsequently visited by GPU personnel accompanied by an unknown, unidentified person to discuss "humiliating personal subjects". Parks was warned by B. F. Kanga, Director of Unit 2, "not to go public with my concerns. He (Kanga) said that once before things had gotten much worse for an employee who had tried that and was 'humiliated'." King and Gischel have signed affidavits confirming Parks' allegations.

The altered testimony of the operators in GPU v. B&W and the threats reported by Parks, King and Gischel support our

findings that the operators who testified in the Reopened Proceeding were under pressure to conceal the truth. (Aamodt, January 18, 1982, para. 16, 56). There was evidence of inappropriate contact between GPU attorneys and two witnesses. The evidence is that the attorneys did admit, when faced with the evidence, to preparing two operators against Judge Milhollin's express order. (Id.; Tr. 26,797). Judge Milhollin believed that the violation of the Sequestration Order had been a misunderstanding and in good faith, despite the fact that he was troubled by the poor quality and character of some of the operators' testimony (Tr. 26,797), including the two operators known to have been prepared by GPU. (Special Master's Report, para. 108-111). Although Judge Milhollin considered GPU's contacts with the operators to have been a "good faith" misunderstanding,[4] the Commonwealth noted that GPU's interpretation of the scope of sequestration differed from the Commonwealths', other parties' and Judge Milhollin's. (Tr. 26,852).

In discussing the conflicts in the operators' testimony in GPU v. B&W, the Staff reviewers adopted an explanation provided several years ago by the writers of NUREG-0760. (Staff Review, p. 5.6). The Staff's conclusion appears naieve, particularly in view of the Hartman allegations and the affadavits of Parks, King and Gischel.

Further evidence that the operators perjured themselves on the instructions of management is provided by the Parks affidavit. Parks concurs with the B&W position that there is a 'mystery man' who turned off the HPI pumps at 5:41. This not only means that

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[4] The initial discussion of this breach in sequestration was discussed off therrecord at the instigation of GPU's attorney, Blake (Tr. 26,712; 26,797).

they would have had to be turned on, but that information concerning the identity of this person was withheld and for a purpose. Parks stated that everyone at the plant knew that this person was George Kunder. Parks indicated that management attempted to persuade him from revealing this information about Kunder.

The matter of GPU's alleged interference with the operators' testimonies should be of interest to the Commission and the parties of the Restart Proceeding. A showing has been provided by the operators' testimony in the court trial, where testimony was changed concerning an event that happened nearly four years before -- initiation of the HPI pumps. Evidence of the influence of management on the operators to give false testimony was provided by Hartman who alleged that management directed the operators to falsify (leak rates). Existing on the Restart record is evidence of the violation of the Sequestration Order by GPU's attorneys. Hidden within the Justice Department, in an action which halted the DOJ investigation of the Hartman matter, is an allegation of improper interference of GPU attorneys.

The conflicting testimony of the operators noted in NUREG-0760 and by the parties to the Reopened Hearing was evidently a problem in the DOJ investigation. It was noted in GPU v. B&W and anticipated by Chairman Palladino at the briefing ("What did they say now?"). Considered together, these examples provide sufficient evidence to show that there is a problem. An alleged cause, the interference of GPU, appears to be surfacing. Further investigation is needed since the matter is highly relevant to the Commission's decision concerning restart. There is no issue more important than whether GPU and the operators can be relied

upon to tell the truth.

IV. CONCLUSIONS

The implications of falsification of leak rate data at TMI-2 reach beyond its impact on the accident. In the context of the Restart Proceeding, the nexus is the issue of management integrity, litigated in the Reopened Hearing. This blatant example of deceit with its attendant trial of damage to the plant, shareholders' earnings, customers' electric rates, the nuclear industry's image and insurance program, and most importantly, the community at risk, cries for renewed litigation. The fact that GPU withheld information on their investigation of falsification of leak rate data in response to our interrogatory calling for all records of information dealing with any and all forms of cheating provides in itself adequate basis to reopen the Restart Proceeding.

This new information can be expected to resolve an unanswered question of the Reopened Hearing: Why was it so difficult to extract the truth from the operators concerning 'cooperation' or cheating on examinations? Were the operators 'stonewalling' on express instructions from their employer, GPU? Were the operators, who were our witnesses and not GPU's, coached by GPU's attorneys? Was the integrity of the hearing compromised after all? It is incumbent on the Commission to see that this issue is litigated.

The fact that the NRC Staff was willing to conclude the Restart Proceeding and make a recommendation for restart of TMI-1 before the Justice Department investigation of Hartman was resolved or to make this information record evidence in the Restart

Proceeding, makes the Staff culpable as well. The Staff, in their briefing of the Commissioners and in their review, made it appear that the Hartman information is still buried in the secrecy of the DOJ investigation and in a B&W deposition not yet provided. This is contrary to facts. The Hartman matter was aired in GPU v. B&W and is available in the transcript.

V MOTIONS

1. Our review of GPU v. B&W transcript provides sufficient showing in fact to support the following motion:

> The Aamodt Family motions the Commission to order the record of the TMI-1 Restart Proceeding to be reopened to receive the new information contained in the GPU v. B&W action for the express purpose of reevaluating GPU Nuclear management capability and integrity.

2. Although it was not possible to make a complete analysis of the trial (GPU v. B&W) record, as discussed, we have found new evidence that is significant to the TMI-1 Restart Proceeding. This evidence calls into question the Licensing Board's findings on GPU Nuclear management integrity and competency as well as the training program and NRC licensing of TMI-1 operators. We have presented the Hartman evidence as well as some other evidence as a showing of the importance of this evidence. However, we need considerably more time and more ready access to pertinent documents to proceed further. Therefore,

> The Aamodt Family motions the Commission to provide an additional sixty days for comment and to instruct the Staff to serve the transcript and the exhibits of the trial (both those entered into evidence and those not entered but prepared) directly on us.

3. The GPU investigation of the Hartman matter, discussed above, should have been served on the parties to the Reopened Hearing in response to Judge Milhollin's prehearing ruling

(October 2, 1981). This material could reasonably be expected to have materially influenced findings, particularly with regard to management integrity. Therefore,

> The Aamodt Family motions the Commission to direct GPU to serve the report of inquiry into the Hartman matter on the parties to the TMI-1 Restart Proceeding.

4. The conflicts in the testimony of the operators in GPU v. B&W with their prior testimony be viewed in light of recent information supplied by Parks, King and Gischel as inappropriate influence by GPU and their attorneys. This matter is highly relevant to the Restart Proceeding and to the Commission's decision. Therefore,

> The Aamodt Family motions that the Commission serve the affidavits of Parks, King and Gischel on all parties to the Restart Proceeding and obtain and provide the transcript and all documents related to the allegations in the Justice Department investigation of Hartman that GPU attorneys exerted improper influence on the testimony in that investigation.

Respectfully submitted,

Norman O. Aamodt for mg

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Marjorie M. Aamodt

Marjorie M. Aamodt

CERTIFICATE OF SERVICE

This is to certify that the document

AAMODT COMMENTS CONCERNING NRC STAFF REVIEW OF GPU v B&W COURT TRIAL TRANSCRIPT AND MOTIONS TO REOPEN RECORD OF RESTART PROCEEDING

was served on the Docketing & Service Branch, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555 on the 16th day of April, 1983 by Express Mail.

Marjorie M. Aamodt

Marjorie M. Aamodt

April 16, 1983