UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

TMIA'S REPLY TO LICENSEE'S PROPOSED
FINDINGS OF FACT AND CONCLUSIONS OF LAW
ON MANAGEMENT ISSUES

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I. Licensee's Command and Adminstrative Structure

1. Licensee insists that, based upon the endorsements of their witnesses and the qualifications and attitudes of GPU's top managers, the command and administrative structure of GPU Nuclear Corporation at both the plant and corporate levels is appropriately organized to assure safe operation of Unit 1. However, we find the record devoid of any evidence to support this conclusion, and therefore we disagree.

2. First, as to the witnesses who testified in support of the new management structure, we find that each one lacked expertise objectivity or credibility. Keimig, ff. Tr. 11946, at 8, Tr. 11,988-98, 12,012-15 (Crocker, Allenspach), Tr. 12024-25 (Haverkamp), Lee, ff. Tr. 13,251,at 11-12, Tr. 13,271, 13,274-75 (Lee), Wegner, ff. Tr. 13274, at 8-12, Tr. 13,309 (Miles), Tr. 11528 (Arnold). In fact, we fault the Licensee for not calling better qualified witnesses to testify.

3. The NRC witnesses who endorsed the new structure included the authors of the document on which the new management sturcture is based, Tr. 12,014 (Crocker). However, these individuals admitted under direct questioning that they had had no management training and were in fact unable to say that the new GPU structure was the optimum for GPU. Tr. 11,991

(Crocker). Another NRC witness who Licensee cites in support of the reorganization is Richard R. Keimig, whose qualifications show absolutely no management training or background. Keimig, ff. Tr. 11,946 at 17. The other NRC witness Licensee mentions is Mr. Donald R. Haverkamp, on-site resident inspector at TMI. Not only do we question Mr. Haverkamp's objectivity in evaluating GPU's management structure, (see discussion, Tr. 12,025-30) but we also question his expertise in the area. He has stated that since the accident at TMI-Unit 2, fully two years ago, he has personally observed no other utility- including those which have themselves undergone management reorganization as a result of problems evidenced by Met-Ed management during the accident. Tr. 12,025, 12,030 (Haverkamp). Thus, we believe Licensee's reliance on Mr. Haverkamp's commendation of the new management structure most inappropriate.

4. Licensee also called what it believed to be independent experts in the area of utility management. Messrs. Miles and Wegner, members of the Basic Energy Technology Associates, Inc. (BETA), were called to testify on management capability. Again, the backgrounds of these two individuals, as well as the other two individuals which compose BETA, indicate no management training or experience in the area. Wegner ff. Tr. 13,284, Attachment 1. We therefore can not help but question their qualifications and competence in evaluating a management structure.

5. Also praising the new structure was Mr. William S. Lee, President and Chief Operating Officer of Duke Power Company, and

Chairman of the Board of Directors of the Institute of Nuclear Power Operations (INPO). While we do not question Mr. Lee's expertise in the area, stemming from his management experience with Duke Power Co., Lee, ff. Tr. 13,251, at 2-3, we do have grave doubt as to his objectivity and credibility. First, we believe his prominent position in the nuclear industry unquestionably influences his ability to objectively evaluate this utility for purposes of this hearing, since the future of the entire industry may be affected dramatically depending upon the outcome of our final decision.

6. But also, we tend to cast doubt upon Mr. Lee's credibilityin a more specific way. This is due to certain statements he made concerning management's response to the accident at Unit-2. Mr. Lee stated that "they behaved strongly and well during the accident," Tr. 13,274 (Lee), and that Messrs. Diekamp, Arnold, Herbein and Miller demonstrated effective abilities to respond to a crisis environment with objectivity and calm. Lee, ff. Tr. 13,251, at 4. These opinions are in direct contradiction to the conclusions drawn by virtually every independent investigation into management response to the accident. (See paragraphs 23 et. seq., infra). Therefore, we have no confidence in Mr. Lee's assurance that the new management at GPUNC is competent to operate a nuclear power plant.

7. The Board also received unqualified approval as to the new management capability from its spokesperson, Mr. Robert C. Arnold, President of GPUNC. Arnold, ff. Tr. 11,434. However,

we attach great significance to Mr. Arnold's inability, on direct questioning,to outline any substantive improvement this structure will have over the old, aside from administrative convenience. Tr. 11,528 (Arnold). In sum, we heard no independent objective, credible, or expert witness who could provide the Board with testimony or evidence of any substantive change which the new GPUNC would have over the old structure.

8. In addition, we disagree with Licensee's conclusion that the attitude of key GPU management personnel with respect to the importance they placed on safety contributes to the satisfactory resolution of CLI-80-5, Issue (1). In particular, we have serious misgivings as to Licensee's choice to head GPUNC, Mr. Robert Arnold. In the past, Mr. Arnold has shown no reluctance to risk the public's health and safety in order to maximize the corporation's profits. Tr. 4,171, 4,178, 4,183 (Reismiller). We were distressed that both in his prepared testimony and under direct questioning, he lacked an emphasis on safety as well as a complete command of details. Arnold, ff. Tr. 11, 434; Tr. 11,520-21, 11,526-29, 11,548(Arnold), especially with respect to his endorsement of Mr. Philip Clark's qualifications to take charge of TMI-1 in emergency situations.

9. To contradict Licensee's position that no negative comments were received with respect to its thoroughness, seriousness and determination in approaching restart, we observe that Licensee has never yet undertaken to correct structural or other deficiencies in management or maintenance areas without

having been forced to do so. In other words, but for the accident at Unit 2, we have seen no evidence that any of the following changes would have been attempted: correcting record keeping deficiencies, improving safety-review problems, reducing overtime excesses, improving prioity designations on maintenance work, as well as actually changing the corporate structure.

10. To further illustrate this point, Licensee admits that an across-the-board operations and maintenance budget cut was proposed by GPU management for the year 1979. Tr. 4,038-40 (Wise). TMIA does not allege that the cuts were implemented to any significant degree, due to the intervening accident at Unit 2. However, what the Board is most concerned with is Licensee's suggestion that a cut in the maintenance budget at that time, when maintenance and overtime procedures and policies were severely inadequate, was an appropriate step. Licensee has now increased their maintenance budget and personnel, but it seems fairly obvious that but for the accident and these restart hearings, cuts rather than increases would hve been implemented. We have no reason to doubt that Licensee will resume former parsimonious ways once the hearing process ends, and this causes us tremendous concern.

11. In conclusion, we find no support that Licensee's new management structure is any real improvement over the structure in place at the time of the Unit 2 accident. We see no evidence that management attitude has improved whatsoever, and we have no confidence that Licensee will choose to correct newly arising problems in their management structure or otherwise,

and therefore find that Licensee is still not in compliance with the August 9 Order, 10 N.R.C.141 (1979), Staff Ex. 1, App. C.

II TMI-1 Organization

12. Licensee has enunciated an explicit goal of increasing onsite technical and management resources, Tr. 11,438(Arnold), and of restructuring the TMI-1 organization so effective control over important activities and decisions is maintained by TMI-1 management. Hukill and Toole, ff. Tr. 11,617 at 2. At the same time, however, Licensee has established the GPU Maintenance and Construction Division which will itself establish maintencane policies for all GPU nuclear plants, including Unit 1, as well as perform work the onsite organization can not or does not wish to do. Tr. 13,645 (Manganaro); Manganaro ff. Tr. 13,643 at 2. The functions of this organization seem to be at odds with the above stated goals. Thus, we question Licensee's true committment to this goal. But in addition, we view this as an example of Licensee's insincerity with regard to statements made to the Board in written and oral testimony, which leads us to conclude a lack of committment to make truly effective changes in its maintenance department.

13. Further, we imagine that for all the benefit Licensee expects the Maintenance and Construction Division will provide, its actual existence will rather impede efficient maintenance performance. Confusion as to who actually controls the Maintenance and Construction Division workers, [see variously Licersee's view that the O&M Director controls in paragraph 57 of Licensee's

proposed Managements Findings, Mr. Manganaro's view that the Plant Manager controls, Tr. 13,648, and Plant Manager Mr. Daniel Shovlin's uncertainty as to whether his department will control maintenance work or not, Tr. 13,611 (Shovlin)], as well as the vague policies regarding coordination of the TMI-1 Maintenance Department and the Maintenance and Construction Division, as evidenced by Mr. Manganaro's testimony, provide strong indications that the existence of both departments could be extremely problematic. We see no acertainable benefit to the Maintenance and Construction Division's existence other than what could be accomplished by strengthening TMI-1's own Maintenance Division. At least this would be consistent with Licensee's own stated goals.

III. TMIA Contention 5
Safety-Related Maintenance

14. It is not disputed that TMIA Contention 5, and our jurisdiction to review under the Atomic Energy Act extends only to safety-related items. The parties vigorously disagreed, however, in defining the term safety-related. For purposes of introduction of evidence in this hearing, Licensee chooses to blame TMIA for not having its own technical definition of the term, thus making the process of introduction of evidence smooth than they would have liked. Clearly, neither TMIA nor the attorneys representing them in the initial presentation of TMIA's case had enough technical expertise to advise the

Board and the Licensee as to their position. Tr. 3,035 (Selkowitz).

15. As inequitable as this situation may have been, however, we believe TMIA's approach was unquestionably more reasonable than the Licensee's. TMIA maintained that in light of the Kemeny Commission's findings that the accident at TMI-2 was caused by deferred maintenance as to components not identified as safety-related, but which impacted upon safety-related components, it would be most prudent for the Board to examine any evidence or exhibits which would fall within this definition. Tr. 2,575-76 (Selkowitz). Recognizing that Licensee may not have particularly liked this approach, Tr.2,577 (Selkowit), TMIA called Licensee's witness, the Manager of Plant Engineering, Mr. Joseph J. Colitz, to provide the technical expertise as to whether the failure of a particular component could result in a major safety problem at the plant. The final conclusions as to safety-relatedness were to rest with the Board. Tr. 2,576 (Selkowitz).

16. The most significant problem which this process revealed, however, was not that TMIA lacked the technical expertise to evaluate each safety-related component, structure or system at TMI-1, but rather that Licensee itself had a nonexistent or at best inadequate concept of safety-relatedness and its importance. The accident at Unit 2 certainly revealed this, but Licensee's attitude and performance at these hearings demonstrated quite succinctly that this attitued has not changed. Rather than recognizing the possible impact which certain systems, structures and components might have on the

public's health and safety, Licensee placed their emphasis on the possibility that an item may not be nuclear safety-related as a basis for restricting the Board's review of an item.

17. Futher, even if safety significant items were eventually admitted into evidence, Licensee repeatedly stressed the absence of demonstrated proof that deferral of maintenance on the item actually impacted upon the public's health and safety, (paragraph 90 of Licensee's proposed management findings), reasoning that because Licensee was able to explain maintenance delays without challenge, the health and safety of the public was never endangered. The Staff took a similarly narrow position. See Shovlin, et. al., ff. Tr. 13,533, at 23-24, 75-76; Keimig and Haverkamp On Response to TMIA Contention 5, ff. Tr. 16,412, Table B at 2, 8, 11; Keimig and Haverkamp-Sample Year 1978, ff. T. 16,412 at 11. This obscured viewpoint thoroughly disregards the fact that while the health and safety of the public was fortunately not directly harmed each time a maintenance item was deferred at Unit 2, it was only luck which prevented a major accident. Licensee's luck eventually ran out. Obviously, Licensee's shortsightedness has not changed since the accident.

18. As further evidence of Licensee's attitude toward protecting the public's health and safety, we note their steadfast refusals to formulate objective standards by which their performance can be judged- a convenient method by which to evade review. For example, Licensee is emphatic that it had and continues to have no firm standard defining the time

within which work of whatever importance was and is required to be accomplished. Tr. 3,085 (Shovlin); Shovlin et.al., ff. Tr. 13,533, at 45-47. (See also paragraphs 71, 72, and 76 of Licensee's proposed findings on management issues). By conveniently formulating no standard or guidelines, they can honestly state that safety-related maintenance deferral did not exceed company policy. However, this conclusion obviously begs the question of whether maintenance was deferred to the point where the health and safety of the public were risked in violation of the Atomic Energy Act and its implementing regulations.

19. We found further distressing Licensee's reluctance to admit that past problems which Licensee claims to have corrected, were really problems at all. For example, Licensee claims that the old prioity system was clearly unsatisfactory Tr. 3063-4 (Shovlin), and that its new priority system, Lic. Ex. 2, is radically different for the old system. (See paragraph 72, 73 of Licensee's proposed findings on management issues), Tr. 2,885-86 (Colitz). Notwithstanding the fact that neither TMIA, Tr. 3069(Adler), nor the Board agrees what the new system is much different, see paragraph 20, infra, the Licensee seems quite proud of the changes made. Yet at the same time, Licensee maintains that the old system functioned effectively. (See paragraph 72 of Licensee's proposed findings on management issues). We are bewildered.

20. Further, we view the new priority system as being no improvement over the old. Licensee admits that the procedure

for designating priorities on Job Tickets has not changed in any substantial way. Whereas under the former procedure, the priority designation was routinely second guessed by the Work Request originator's superiors, under the new procedure, the identical routine is followed. The only apparent difference is that it is now written into the procedures. Tr. 3069 (Shovlin). The former procedure of designating priorities required a tremendous element of subjectivity, Tr. 3071-72 (Shovlin), but the new procedure hardly eliminates the subjectivity required. An approximately two page general explanation can not be expected to provide much guidance in assisting a priority designator to prioritize a particular work item. Lic. Ex. 2. We are also dissatisfied with the failure of the priority system to specifically designate safety-related items so they may be given special attention as required by 10 CFR Part 50, App. B. For example, any item which could cause a plant shut-down is to be designated a priority 1, yet Licensee's own witness testified that a shutdown is not always safety-related. Tr. 3,138 (Colitz). Further, the priority system requires a judgement as to the predictable amount of time the job will require. Yet we have seen that Licensee has no reliable method to determine estimated man-hours. See TMIA proposed management findings, paragraphs 26-31. Therefore, the new system is certainly no great improvement over the old system, and in fact, many former problems still remain.

21. Extensive use of overtime in performing safety-related maintenance. We do not dispute Licensee's point that the

prudent use of overtime may be acceptable. However, the question remains whether scheduling 12 hour days, 7 days a week, [under the prior procedure, Shovlin, et. al., ff. tr. 13,533 at 72; Tr. 3,972 (Gehman); Tr. 3,991 (Eberle)] or 12 hour days, six days a week [under the current policy, Shovlin, et. al., ff. Tr. 13,533 at 10, and Attachment 13 & 14]; or the use of coercion by placing a letter in an employee's file who can not or does not wish to work overtime, even if sick, Shovlin, Id., at Attachment 10, Tr. 4,177 (Reismiller), is prudent.

22. Licensee justifies its use of overtime in various ways. In certain instances,it claims overtime is beneficial, and we agree that in certain specialized circumstances, it may be more efficient to permit the same individual to continue work as long as the overtime used will not fatigue the worker in any way. But Licensee also claims overtime was "appreciated" by the employees. Tr. 3986 (Eberle), and that the individual who testified at these hearings that overtime was often not "appreciated" was "complaining bitterly." See paragraph 112 of Licensee's propsed findings on management issues; Tr 4,178 (Reismiller) We did not interpret Mr. Reismiller's testimony as complaining, nor did we infer that Mr. Reismiller was in any way bitter. But even assuming that some individuals did appreciate the opportunity to make some extra money by working overtime, Licensee misses the point. A utility's obligation is soley to protect the public's health and safety, not to accomodate a worker wants to make some extra money and who will continue to

work even as his or her alertness and capabilities diminish, Licensee's defense of the use of overtime in these circumstances reflects an economizing attitude which we have seen time and time again, and which we find totally unacceptable. Further, we have no assurance whatsoever that Licensee will even keep within the new guidelines, Tr. 4,169 (Reismiller), let alone eliminate the extensive use of overtime at TMI-1.

IV Licensee's Management Response to the TMI-2 Accident

23. Licensee concludes that the actions of Licensee's corporate or plant management (or any part or individual member thereof) in connection with the accident at Unit-2 do not reveal deficiencies in the corporate or plant management that have not yet been corrected, which must be corrected before Unit 1 can be operated safely.

24. Licensee names various sources in support of this conclusion. It cites the testimony of Mr. Richard Keimig who is of the belief that there are no remaining items raised by IE's investigation of the accident which Licensee's response is considered inadequate, despite the fact that Mr. Keimig also stated that Licensee's corrective actions have never been inspected, and that there is still work to do by the Licensee. Tr. 11,982 (Keimig). Licensee also cites Messrs. Wegner and Lee who both endorsed the restart under current management. Neither Mr. Wegner nor Mr. Lee, we note, have conducted investigations into management response

to the accident, thus making their opinions less than expert. Mr. Wegner believes that problems inherent throughout the entire civilian nuclear power industry set the stage for the accident at TMI-2. However, even he remarked that Licensee, as well as the entire industry, still has problems needing correction. Wegner, ff. Tr. 13,251, at 34-35. Mr. Lee, on the other hand, states that Licensee's management acted with great skill and steadfast purpose during the accident. Lee, ff. Tr. 13,251, at 5. We find no support for this conclusion. (See paragraphs 23, et. seq., infra.)

25. Licensee also cites its own internal investigation which apparently excuses management response to the accident. The only investigation as to which we received any testimony was one conducted by Mr. Arnold himself, but we find the testimony ambiguous as to what conclusions were actually reached by this or any other internal investigation. Tr. 11,597-99 (Arnold). We certainly find fault with the approach of Mr. Arnold's investigation which did not examine the performance of particular individuals directly involved with the accident. In fact, it is the nonrecognition of certain deficiencies in its corporate management, particularly certain individual members therof who were directly responsible for the accident, which causes us to strenuously disagree with Licensee's conclusions that all problems have been corrected.

26. For example, there are several clear instances of poor judgement, if not intentional wrongdoing, on the part of Mr. Jack Herbein, senior management official at TMI during the

first day of the accident. Mr. Herbein's first misjudgement occured at approximately 6:00 A.M. on March 28, during a conference call in which he was the most senior official participating. During the call, Mr. Gary Miller, Station Superintendent, was ordered to the site to take control. Staff Ex. 5, App. B, at 8-2. Mr. Miller was known, and unhesitatingly admits to have been inadequately trained and prepared to handle the situation at the plant. Staff Ex. 5, App. B, at 51-1; NRC Special Inquiry Group, Report to the Commissioners, Vol. II, Part 3 (Rogovin), at 918. He had had throughout most of the year preceding the accident, the dual responsibility of station superintendent and Unit 2 superintendent, so overloading him with responsibilities that he was unable to attend 45 of 47 PORC meetings scheduled. Id.

27. The placing of Mr. Miller in this position was an unfortunate mistake made even more unfortunate by Mr. Herbein's decision to keep Mr. Miller in control upon his arrival at the plant. This decision was made without any personal on-site inspection of the situation by Herbein, Keaton (Management Response to TMI-2 Accident), ff. Tr. 13,242, at 6, despite his expertise and detailed knowledge of the plant and Miller's inadequacies. Arnold, ff., Tr. 11,434, at 15-16.

28. And we note that by this time, Miller had already engaged in a conversation with Mr. George Troffer, a Met-Ed official in Reading, PA, in which Miller admits to deliberatly withholding certain extremely important information from the State in an earlier telephone conversation. Staff Ex. 5, App. B at 109-2. We can reasonably infer that Mr. Herbein's off-site

briefing by Mr. Miller upon arrival included explanations of the conversations with both the State and Mr. Troffer. We can not overemphasize the seriousness of this inference. In addition, Mr. Herbein's decision to keep Miller in primary control that day was despite continuing disagreements which Miller and Herbein had in attempting to control the plant situation. Rogovin, at 834.

29. Among those disagreements was Herbein's decision to then remove Miller, as wellas Mr. George Kunder, TMI-2 Superintendent for Technical Support, from the site for a Harrisburg briefing of the Lt. Governor. Rogovin Supplement of March 4, 1980, at 48. This decision was also made against his staff's own recommendations. Rogovin at 834, and has been deemed a serious misjudgment both on the part of Miller and Herbein. Staff Ex. 5, at 46.

30. At approximately 1:50 P.M. a major contributing cause of the accident occurred-i.e., a hydrogen explosion in the reactor building indicating core uncovery, which was evidenced in the control room by a pressure spike. Report of the Subcommittee on Nuclear Regulation for the Committee onEnvironment and Public Works, U.S. Senate, (Hart), at 14, Staff Ex. 5, at 7. This was ten minutes before Miller, Kunder, and Herbein left for the Lt. Governor's office. We know that Miller was probably aware of, or at least had reason to be aware of the spike, since he did hear the explosion. Id., at App. B, at 72-1, 73-1.; Rogovin Supplement, at 48. The evidence is unclear whether Miller knew the significance of the spike at the time, although certainly he should have. Staff Ex. 5, at 47. He claims he did not know, Id., at 72-1, but other evidence indicates he was indeed told of the likely significance of the situation. Id., at 57-2,3.

Perhaps if Herbein were on-site, his expertise could have assisted in a more immediate and accurate interpretation, but we can at least infer that even if Miller did not correctly evaluate that data, Id., at 72-1, he communicated the occurrence of some problem to Herbein on their way to the Lt. Governor's briefing.

31. We know , however, that this information was not communicated to the Lt. Governor. We also know that Herbein was aware of high thermocouple readings, but did not communicate this information either. Rogovin, at 901. In fact, Herbein deliberately downplayed the seriousness of the accident, giving the impression that everybody was making a big deal out of nothing. Staff Ex. 5, at 44, App. B at 113-1. In addition, the evidence indicates that at this same "briefing", the three management officials lied to the State officials concerning offsite releases of radiation. Id., at 42.

32. Curiously, Herbein was the principal spokesman at this meeting, Id., at 44, which leads us to question why Herbein felt it necessary to force Miller and Kunder to accompanh him at all. Common sense would dictate that once he had made the decision to place Miller in control of the plant, he would not then decide to remove him, leaving all three individuals out of direct communication with the plant for quite a long time. (Note that 3/4 of an hour of this trip has been unaccounted for. Tr. Discussion, at 16,542.) In fact, Mr. Arnold did try to contact Herbein concerning the start of repressurization, which eventually helped to bring the plant under control,which due to their delay in returning, could not begin until 4:30 P.M. Rogovin

at 837.

33. Thus, we can reasonably infer from these series of events that Herbein, and Miller, whom Herbein placed in control of the plant, exercised serious misjudgment and withheld crucial information from State and Federal officials. While we do not know the whereabouts of Mr. Miller today, we know that Mr. Herbein has been placed as the new head of GPU's Nuclear Assurance Division, with responsibilities over all GPU nuclear emergencies. From this, we can reasonably infer that Licensee not only found Herbein's performance on March 28, 1979 "non-deficient," but saw fit to reward him by placing him in this high-level position.

34. As further evidence of Licensee's failure to recognize individual performance problems in connection with the accident, we note that Mr. Herman Diekamp, President of GPU, sent a mai-gram to Congressman Morris Udall, Chairman of the House Committee on Interior and Insular Affairs on May 9, 1979, in which he stated that "there is no evidence that anyone interpreted the 'Pressure Spike'....in terms of reactor core damage at the time of the spike nor that anyone withheld any information." Staff Ex. 5, at 45, App. B at 117-1.

35. As to the first part of Mr. Diekamp's statement, obviously he was unaware of Shift Supervisor Chwastyk's statement that he did indeed believe the spike indicated that a hydrogen explosion had occurred, Staff Ex. 5, at App. B, 57-4, logically indicating core damage. However, even more serious is the second part of Diekamp's statement. The IE investigation

concluded that in fact the NRC was not informed of the pressure spike, and indeed, Licensee received a noncompliance citation for not reporting this incident to the NRC in violation of 10 CFR §20.403(a). Staff Ex. 5, App. A, at A-1. Although Diekamp was not specifically cited for making a material false statement under §186 of the Atomic Energy Act on the basis that the statement was neither made in a licensing application or a statement of fact required under §182 of the Act, we have serious question as to whether the statement can be considered materially false under normal standards. Tr. 13,061 (Smith). Notwithstanding the fact that the NRC chose not to sanction Diekamp, we believe t he Licensee should have at the very least admitted his error and reprimanded him. Yet, they have never done so.

36. Many different conclusions have been drawn concerning Licensee's response to the accident. (We note that the United States Department of Justice is still conducting its investigation and has drawn no conclusions yet. Staff Ex. 13, at 9) But all conclusions are merely variations on one theme- management's response was inadequate, at best. See Rogovin, Vol 1, at 159-160; Vol II, Part 3, at 894-913; The President's Commission's Report, at 18; the Rogovin supplement; Hart at 13, et. seq.; Staff Ex. 5 at 10-12; Udall Report, cited at Tr. 12,047-48 (Dornsife).

37. Karl E. Plumlee, NRC Radiation Specialist, Region I, has explained that "Met-Ed's main interest was to get the plant back on line to start generating electricity"....causing them to follow a strict attitude of "mind your own business" vis-a-vis NRC until the problems got big enough that they

realized it could not be done... and that Met-Ed only told NRC what it was bound to tell or asked of them." Staff Ex. 5, App. B, at 92-3. State officials have indicated a similar attitude, Id., at 113-1, stating that on various occasions, important information was withheld concerning the adequacy of core cooling or the potential for degradation of plant conditions, Id., at 31, voiding of hotlegs and the fact that pumps were not pumping, Id.,at App. B, at 100-2, and radiation releases. Id.,at 42. In fact, failure to report certain information resulted in an NRC noncompliance citation. Id., App A. Further, one of the most in-depth investigations into the accident, prepared by the Majority Staff of the House Committee on the Interior and Insular Affairs, indeed concluded that State and Federal officials were not given information which TMI managers understood to be related to the severity of the situation or deliberately mislead those officials, conveyingthe impression that the accident was less severe than it was.

38. What assurances do we have that Licensee will not again respond this way in another nuclear emergency? We know that from a technical standpoint, a similar type accident did occur at TMI during hot-functional testing.Id., at App. B , 56-1. But we can reasonably infer that Licensee apparently learned nothing from the first incident regarding proper response and control. The same people who so poorly handled these incidents are still in high corporate positions at GPU. In fact, no one was fired as a result of the accident. Tr. 11,601 (Arnold). Unless some positive steps are taken, we have no confidence that this type of accident will not reoccur. Therefore, as the last remaining sanction available, we order Licensee not to restart Unit 1. Id.,at 51.