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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

ORAL PRESENTATIONS BY PARTIES ON TMI-1 RESTART

OPEN MEETING

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In the Matter of:

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4	ORAL PRESENTATIONS BY PARTIES ON TMI-1 RESTART
	OPEN MEETING
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6	Nuclear Regulatory Commission 1717 H Street, N.W.
7	Room 1130
8	Washington, D.C.
	August 15, 1984
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11	The Commission met, pursuant to notice, at
12	10:00 a.m.
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	COMMISSIONERS PRESENT:
14	NUNZIO PALLADINO, Chairman of the Commission
15	JAMES ASSELSTINE, Commissioner FREDERICK BERNTHAL, Commissioner
16	LANDO W. ZECH, JR., Commissioner
17	
	STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
18	S. Chilk, Secretary
19	H. Plaine, General Counsel R. Thornburgh, Governor of Pennsylvania
20	W. Kuhns
21	P. Clark G. Trowbridge
-	E. Blake
22	N. Aamodt M. Aamodt
23	J. Doroshow L. Bradford
24	E. Weiss
	H. Denton J. Goldberg
25	J. Murley B. Russell

DISCLAIMER

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contain inaccuracies.

PROCEEDINGS

CHAIRMAN PALLADINO: Good morning, ladies and gentlemen. Would you please take your seats? This morning's meeting is for the purpose of hearing oral presentations on issues related to Three Mile Island Unit 1.

On June 1, 1984, the Commission issued an order requesting parties' comments on whether, in view of all the relevant information, the management concerns which led to the 1979 shutdown of TMI-1 had been sufficiently resolved so that the Commission could lift the immediate effectiveness of a shutdown prior to completion of review of appeals.

The Commission in 1979 obligated itself to ask this question. It did so by shutting down TMI-1 reactor without the benefit of a prior hearing, and by indicating that it would lift the immediate effective order when the concerns that led to it were adequately resolved.

It thus provided for the separate restart question and decision, and it recognized at the same time that all administrative appeals and reviews might not be completed at the time it addressed the restart question.

We sometimes used shorthand titles for these two

actions. In the shorthand, we often refer to the lifting of the immediate effective shutdown order as the immediate effectiveness review, and refer to the appellate process as the merits review.

This sometimes leads to misimpressions about what is involved in each of these reviews.

I should point out that in both reviews, the issues involved are addressed and resolved to the satisfaction of the Commission.

The difference is that in the so-called immediate effectiveness review, the Commission concentrates on the concerns that led to the immediate shutdown of TMI-1 in 1979.

The Commission is free to utilize any and all pertinent information available to it, whereas in the so-called merits review, second order issues may also be addressed and only information available on the record is considered.

Today we are honored to have present Governor
Richard Thornburgh, of the Commonwealth of
Pennsylvania, to present the views of the Commonwealth.

I would like to express our appreciation to Governor Thornburgh for offering to speak to us today, and to commend him for his forthright and constructive initiatives in helping to develop a funding plan for

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cleanup of TMI-2. We look forward to his comments today.

We have allotted the governor and his party that will follow him time for the presentation and questions.

AUDIENCE: We can't hear.

CHAIRMAN PALLADINO: I'll talk into the mike. Can you hear me now? All right. Thank you. We have allotted the governor and each party that will follow him time for the presentation and questions.

If parties wish to save time for rebuttal, they should so indicate.

I encourage all speakers to be brief and to the point, and I also encourage those of us on this side of the table to permit the speakers to complete their statements before questions.

There will not be presentations today beyond those provided for in the schedule, which can be found at the rear of the room.

I would like to point out that we have an overflow room in case we get too crowded here, in which the audience can see and hear today's proceedings on the TV monitors.

Let me ask now whether other commissioners have opening remarks.

COMMISSIONER ASSELSTINE: Joe, I had not planned to have other remarks, but I guess I do have to respond briefly to a couple of points you made in your opening statement.

First, it seems to me that the distinction between an immediate effectiveness review and a merits review in this case is not nearly so clear-cut or sharp a distinction as as is the case in an initial licensing decision.

I've made that point before. I'm not sure I agree with drawing that fine a distinction in this case. It does seem to me that before the Commission allows restart at TMI-1, it has to assure itself that it has sufficient information to conclude that all of the concerns that led to the initial shutdown order and all of the concerns that have since been identified that are relevant to the operation of that plant have, in fact, been satisfactorily resolved.

Second, I have a concern about your statement on the record information and extra record information.

It seems to me that's one of the key questions that we have to consider here today.

It does seem to me that the Commission promised at the outset of this proceeding that its decision would be based upon an adjudicatory record.

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I think one of the questions that we have to confront today and in the weeks ahead is whether we're now prepared to depart from that and consider extra record material that has not been tested by the kind of trial type procedures that would be available in an adjudication.

So I'm not prepared for myself, at this point, to say that it's clear-cut, that an immediate effectiveness decision could be based upon extra record material.

I think that's an issue that we have to discuss today with the parties.

CHAIRMAN PALLADINO: All right. I appreciate your comments. Thank you. Any other comments? All right. Let me turn now to Governor Thornburgh.

(Applause.)

GOVERNOR THORNBURGH: Mr. Chairman, members of the Commission, on the evening of April 6, 1979, it was my pleasure to tell thousands of very brave, tired, bewildered and innocent Pennsylvanians that ten days of nuclear nightmare were coming to an end.

I told them then that the accident at Three Mile

Island never should have happened in America, and that

for the remainder of my service as governor, I would be

dedicated to the proposition that it never would be

allowed to happen again. And that's why I'm here today. You have asked if it would be appropriate for the Commission to vote at this time on the resumption of nuclear power generation on Three Mile Island.

My answer is, "No."

(Applause.)

GOVERNOR THORNBURGH: I repeatedly have expressed to you, to your predecessors, and to others my opposition to any restart vote unless and until funding has been assured to complete the radiation cleanup of the damaged Unit 2 facility on TMI, and unless and until this Commission has provided adequate assurances that Unit 1 can be operated without threat to the health or safety of the people of Central Pennsylvania or the integrity of our environment.

(Applause.)

GOVERNOR THORNBURGH: My safety concerns ...

CHAIRMAN PALLADINO: Excuse me, ladies and gentlemen. Would you please refrain from applause or other indication of response? Thank you.

GOVERNOR THORNBURGH: Thank you, Mr. Chairman. My safety concerns and those expressed by others have involved a number of questions relating to such areas as the quality of the staffing, training, and monitoring at the plant site, the physical quality and

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condition of the plant itself, operator competence and integrity, emergency management planning, and most recently, the Unit 2 cleanup funding impasse.

While it is true that progress has been made in several of these areas, it is also true that sufficient funding has not yet been assured for Unit 2 decontamination, and that adequate safety assurances have not yet been fully provided, regarding the operation of Unit 1.

On the contrary, we need look no further than your own staff's memorandum of July 12 to understand why Pennsylvanians are such a long way from feeling assured in this matter.

This memorandum, as the chairman has noted, is entitled "Possible Approaches to the TMI-1 Decision." And it offers what your staff calls two major approaches for you to follow.

One approach would provide that you make your restart decision independent of the merits process.

Let me repeat that phrase. "Independent of the merits process."

The other approach, of course, would have you, and I'm quoting again, "wait for completion of the merits process before deciding on restart."

Now, Mr. Chairman, you have noted and I understand

that this somewhat unfortunate terminology may have a much narrower application than it seems to convey, but it is incredibly symbolic of what appears to be wrong with the exercise in which we have been engaged for more than five years now.

There should be no choice at all between settling an issue on the merits or settling it regardless of the merits.

There should be no choice at all between resolving safety questions before cranking up a nuclear reactor or simply putting off those questions and crossing our fingers.

There should be no question at all that the safe removal of the highly radioactive wreckage at one nuclear reactor ought to be assured before another is returned to service and returned to risk, I might add, just 200 yards away.

There should be no question at all that issues regarding the competance and integrity of Unit 1's managers should be resolved prior to any restart.

There should be no question at all that operator training should be fully and properly evaluated and certified by this Commission as meeting the highest standards possible prior to restart and not some time afterward.

And there should be no question at all that an emergency management system for the TMI area should be properly tested and certified by this Commission prior to restart and not some time down the road.

I continue to believe that there is a legitimate role in America's energy future for commercial nuclear power.

But that role has been at risk since March 28, 1979, and it remains at risk today.

The public confidence and support necessary to preserve that role require an approach to the restart issue that places public health, public safety, and the integrity of our environment at the very top of the agenda.

Before any decision is made, a fundamental question not yet answered in the public forum should be resolved through an open hearing of the Atomic Safety and Licensing Board.

That question is, whether an act that led to a federal criminal indictment and subsequent guilty plea, the intentional and systematic falsification of leak rate test results at Unit 2 was directed or condoned by any members of the current management of Unit 1.

Your suspension of the board's effort to answer this question was unfortunate, and I would hope that

you rescend that order and allow the truth to emerge. I also suggest that you fully evaluate other questions of management integrity, in view of the great trust a restart vote would imply, including allegedly willful misstatements made to you through the Keaton Report about management's own degree of responsibility for the accident March 28, 1979.

Under a process deserving of public confidence and support, it also would be ill-advised for this Commission to vote on restart until deliberations on operator training improvements and on steam generator repairs have been completed, and the ASLB's best judgment on these matters has been rendered.

Under such a process, it would be ill-advised for you to vote on restart until an emergency management system, that actually failed its certification test last year, has been corrected and recertified as sound.

Finally, under such a process, it would be illadvised in the extreme for this Commission to ignore the question of Unit 2 cleanup funding in establishing an approach to any Unit 1 restart.

Two years ago, this Commission told the United

States Senate Subcommittee on Nuclear Regulation, and I

quote, "If TMI-2 is allowed to remain in its present

condition over the long term, accidents involving the

public have a greater possibility for occurrence. The potential for these adverse effects, although small now, will increase with time as TMI-2 equipment deteriorates." End of quote.

I'm compelled to point out once again that if the potential for an unexpected release of radioactive material from Unit 2 is increasing with time, and if the cleanup that would prevent such a mishap is delayed perhaps indefinitely, for lack of funding, then this Commission has an obligation to consider what effects such a release would have on the staff, management, instruments, and other resources necessary to a safe and fully-operational Unit 1.

Is it realistic to assume that the work environment at Unit 1 would not be affected by radiation emergency less than 200 yards away?

Or would it be more realistic to assume that a new emergency at Unit 2 could produce any number of adverse reactions at Unit 1, ranging from mere distraction to panic or even actual injury?

Could such a development confront us with a double crisis of unprecedented dimensions? An operating nuclear power plant, suddenly abandoned or understaffed on an island poisoned by escaping radiation.

I believe the people of Pennsylvania deserve

assurances that every reasonable precaution will be taken to prevent such a crisis.

I do not believe that this can be accomplished without a fully funded plan to ensure the safe and expeditious removal of the radioactivity still trapped at Unit 2.

A process deserving of public confidence and support would condition any Unit 1 restart decision on the assurance of Unit 2 cleanup funding.

And I suggest that you can and ought to impose such a condition at this time. To argue that the Unit 2 question was resolved in 1981, long before the funding impasse and the safety implications were raised in Senate testimony by this Commission, would be like arguing that the integrity issue was resolved long before a Federal grand jury indicted Metropolitan Edison Company on criminal charges.

Your own staff has said it probably would not have issued a favorable review of Metropolitan Edison management in 1981 had it known then what it knows now.

The only thing, I suggest, that is constant in this matter has been change itself, and a process that is worthy of public confidence and support is one that adapts to new circumstances, absorbs new facts, and considers new information in the public interest.

In fact, a mere hint that this Commission might condition any restart on the assurance of cleanup funding already has had a positive effect on the willing of the industry to contribute to the cleanup effort.

As you know, we first introduced the funding impasses of Unit 1 safety issue on June 14 of this year.

Just four days later on June 18th, the industry established for the first time ever a firm date for delivery of initial contributions under the \$192 million commitment to the cleanup it first made in 1981.

It also removed a \$100 million trigger condition it had placed on the delivery of any contribution member companies agreed to make under that commitment.

And it voted to divert research and development funds from the industry-supported Electric Power Research Institute into the TMI decontamination effort.

Even so, the electrical utility industry remains to this day the only major partner which has yet to deliver on its commitment under the National TMI Cleanup Cost Sharing Plan I first advanced in 1981.

The Federal Government agreed to fund a \$123 million research and development program tied to the

cleanup and is doing so under the plan.

Pennsylvania taxpayers already have provided a \$15 million downpayment on the \$30 million we pledged under the plan.

\$223 million over a six-year period under the plan.

New Jersey has appropriated the first \$3.6 million of the \$11 million in taxpayer contributions which that state pledged under the plan.

Even the Japanese utility industry has come forward with \$18 million for the cleanup, yet the American industry has yet to deliver one thin dime on the unconditional \$192 million commitment it made in 1981.

So on behalf of those who live within the shadow of Three Mile Island as I do, and those who believe that public health, safety, and environmental integrity must remain our first concerns, I ask once again that you withhold any vote on Unit 1 restart until all major safety issues including Unit 2 cleanup funding have been satisfactorily addressed and resolved.

Now, Mr. Chairman, and members of this Commission, let me add one thing more. I was there on March 28, 1979.

I was there when the worst fear of modern man almost came to pass in Central Pennsylvania. I saw

fear in the eyes of pregnant young women who were forced to live on a stadium floor.

And I saw anger and confusion on the faces of good and innocent people who realized for the first time that there was something out there, powerful, and strange, and not entirely under control.

This nation must demonstrate to these people and to all Americans that nuclear power can indeed be controlled, or risk losing it as an alternative in meeting our energy needs.

That is the task before you now, and there is no other choice. Thank you very much.

(Applause.)

CHAIRMAN PALLADINO: Thank you, Governor
Thornburgh. Please restrain yourself. Governor, we very much appreciate your comments.

I'd like to make a comment or two of my own in response. I believe this Commission, every member of this Commission is committed to resolving the issues that need to be resolved before this plant is started up.

I think as Commissioner Asselstine indicated, there are procedural questions that are involved and we're going to have to cope with those as well.

With regard to the cleanup of TMI-2, I support you

wholeheartedly in the concept that the cleanup has to be done as expeditiously as possible.

I am heartened by the progress on obtaining funding, and we may be able to see completion of a funding pattern in the near future.

We are faced with the question of the degree to which we can condition TMI-1 restart on TMI-2, and we have had correspondence from you on that question.

It has been litigated, although you indicate that it was litigated a couple of years ago, or I guess a little more than that.

However, I should note that the Commonwealth did not follow up with an appeal on that, and perhaps that would have been a wise thing, but that doesn't change the situation with regard to whether TMI-2 is cleaned up or not.

I'm going to ask other commissioners if they have any questions or comments.

COMMISSIONER ASSELSTINE: I have two brief ones.

One had to do with the funding, Governor. I gather from your statement that the one key element in the funding plan that you proposed several years ago, that still has not been fulfilled, is the utility commitments to provide funding.

. If that were made, would that provide the assurance

of funding that you think is necessary to fulfill one of your conditions on restart?

GOVERNOR THORNBURGH: It's difficult to answer that question, Commissioner. And let me perhaps elaborate a little bit on the concern that Chairman Palladino has expressed about the Commission's authority to couple any order on restart with a component that ensures funding for the Unit 2 cleanup.

It is true that no appeal was taken by the Commonwealth in 1981 from the alteration in the original order with respect to funding.

That action was not taken because in 1981, every one of the parties that I suggested would be appropriate as contributors to the cost sharing plan had made firm commitments to ante up their shares.

Three years later, we find that all of the parties, save the National Utility Industry, has honored those commitments.

And it is that kind of change of fact and change of condition that I suggested in my testimony should occasion a review sua sponte by this Commission of the conditions that should be attached to restart.

In answer to Commissioner Asselstine, I should say that from the very outset, in 1979 one of the twin concerns that we have expressed has been the lack of

any assured source of funding for the cleanup of the damaged Unit 2 reactor.

If that assurance were to be forthcoming, particularly from the National Utility Industry, it would remove a major obstacle, obviously, to our feelings about a restart order, but it would leave on the table continuing concern that this Commission examine the record and assure the people of Pennsylvania that the health, safety, and environmental concerns that I averted to, had been dealth with as effectively.

COMMISSIONER BERNTHAL: Let me just, if I can interject and ask a question that relates to that, Jim. It wasn't quite clear to me, Governor, whether you are suggesting that the funding itself be the focus, the major focus, or in your statement, whether the cleanup itself should, in your judgment, be a precondition to the restart. Would you care to comment further on that?

GOVERNOR THORNBURG: I have taken the view from the outset that it would be hazardous in the extreme to restart the Unit 1 undamaged reactor while there was a potential for the cleanup of the damaged reactor at Unit 2 proceeding by fits and starts due to the inability of funding streams to assure a continuity of

operation. In fact, that has already contributed to the delay in the cleanup of Unit 2.

It's one thing not to have the cash in hand. It's another not to have have it assured so that long-term schedules can be planned for an operation that has, as you know, has never taken place before on the face of this earth.

I have no doubt about the technology of cleanup. I have very serious doubts about whether that technology can be utilized effectively and efficiently if the wherewithal to fund that technology is on a day-to-day basis in doubt, and that is my principal concern.

COMMISSIONER BERNTHAL: So the concern is certainly partly funding, but it sounds like one of the questions that you would have us pay some additional attention to, and I'm not sure, frankly, to what extent we've done that, perhaps I just haven't focused on it, but ensuring that there is, as cleanup progresses, even with the presence of adequate funding, ensurance that there can be no destructive interaction, shall we say, between the two units.

GOVERNOR THORNBURG: Commissioner, I have to assume that that's a given.

COMMISSIONER BERNTHAL: Right.

GOVERNOR THORNBURGH: I can't perceive that this

Commission would ignore the consequences of an ongoing cleanup on the startup of Unit 1.

What I'm concerned about is that that cleanup would not in fact be ongoing, that there would be a greater potential for deterioration of the present condition if the funding were to proceed in fits and starts and depend upon promises, I.O.U.s, and broken commitments.

COMMISSIONER BERNTHAL: Thank you.

COMMISSIONER ASSELSTINE: One other question I had was on the reopened hearings. You mentioned particularly the reopened hearings on the integrity issues, training, and the other issues, where our appeal board has already indicated the record should be reopened.

Do you envision any circumstances under which you think the Commission could make a restart decision prior to the conclusion of at least those aspects of the hearings?

I want to set aside the steam generator repairs for the moment. That's one I already agree with you on.

GOVERNOR THORNBURGH: It would be hard to say. I think you'd have to look in probably more detail than I'm prepared to go in this morning in each of those component matters.

However, as a general matter, it seems to me that

this Commission, which is undertaking a task unprecedented in its nature, and which has a highly visible effect upon, I suggest, the future of a nuclear power industry in this nation with ramifications that are international, would want to, as a matter of orderly procedure, dispose of all pending and outstanding questions, perhaps even including those that might be deemed peripheral, in order to present the best face and the most thorough examined record possible to the public in coming to a determination.

So I guess my answer in a yes or no fashion would be I can't conceive of that, however, I acknowledge that there may be intricacies of those proceedings with which I'm not as familiar as the Commission is, and I would have to rest on what my observation was.

COMMISSIONER ASSELSTINE: Thank you.

CHAIRMAN PALLADINO: May I ask a follow up question on the funding? The utilities that had made pledges apparently now are free to honor them.

Does this provide you any additional assurance, at least so far as that aspect of the funding is concerned, that those funds will be provided?

GOVERNOR THORNBURGH: Nearly three years ago, Mr.

Chairman, after my personal appearance before the board of directors of the Edison Electric Institute in Kansas

City, Missouri, that board of directors adopted a resolution committing, without qualification, the electric utility industry in this country to a contribution of \$192 million, which I had requested under the cost sharing plan put forth earlier that summer.

I am advised that as of the close of business yesterday, there is some \$44 million in hand in fulfillment of pledges that have been made in the intervening period of time.

Today is the last day for that ante-ing up to be made. But when I consider that at the close of business yesterday, less than one-quarter, less than 25% of the amount that was firmly committed nearly three years, is actually in hand, I am not heartened, because of an estimated \$200 million shortfall in the amount needed to complete the funding in a timely and orderly manner, comparing that with the cash in hand, I suggest that it should occasion this Commission to very carefully look at its legal authority to condition the restart on the availability of funding for the cleanup, because we have tangible evidence that that funding is not there from the sources that have been already identified.

Now one could add in to that \$44 million the \$18

million from the Japanese utility industry, which I think shows, I might suggest, that this industry in Japan has a very clear appreciation of the importance of the future of nuclear power as a contributor to energy problems, solving energy problems, and a very clear appreciation of their own self-interest and appreciation that apparently exceeds that which is extant in the American utility industry, and which I regret.

CHAIRMAN PALLADINO: One other point. I think, without question, this Commission will be following the funding pattern as it further develops for TMI-2.

And we'll want to receive any new information from all the parties before we make a decision, and we will have to examine, at least reexamine the extent to which any conditions could be placed on TMI-1.

The conditions are one of the things that might be explored, is whether or not or to what extent GPU could provide additional funds.

I think that's an important question to ask of the licensee.

All right. Any other questions or comments?

COMMISSIONER BERNTHAL: Yeah, I'd like to make just a comment or two, and perhaps ask an additional question.

We've talked at some length in previous meetings about this issue of providing funding for cleanup.

I should say that you, Governor Thornburgh, have provided much of the leadership, and to your great credit, at least the framework if not all of the money so far, has been set for a reasonable gathering of the funds necessary to complete the cleanup.

Three years ago, in my judgment, or I guess maybe it's four years ago or more already, the Commission, I believe, made a serious error in judgment.

I think the Commission should have ordered that mess cleaned up immediately and things may have been very different today. I suspect, in fact, that it would be cleaned up today.

Instead, what we have is a spectacle of Federal Government, if you will, arguing over what fraction of the cleanup cost constitute legitimate R and D expenses.

I simply can't subscribe to that kind of polemic in a matter that involves public health and safety.

Utilities arguing with their public utility commissions and then the Japanese, frankly, shaming us all by donating \$18 million to help us clean up our own mess.

We have spoken before, and I think I've asked this question before, Mr. Chairman, whether the Commission

even today at this late date, having missed the opportunity, if I might misuse the word "opportunity," earlier, could still find legal basis for ordering the cleanup, and whether that might not expedite matters and might not bring into play, perhaps, federal or other funding that first sees to it that this mess is cleaned up, and secondly, then, we can let the courts and the lawyers and others argue about who pays for it.

COMMISSIONER ASSELSTINE: Fred, if I might interject...

COMMISSIONER BERNTHAL: It seems to me that's the appropriate procedure to use.

COMMISSIONER ASSELSTINE: If I could just interject on that, I think we agreed...

CHAIRMAN PALLADINO: Yes, we did.

COMMISSIONER ASSELSTINE: ...in our last meeting on TMI-2 advisory panel that we would try just that, and the staff is supposed to be preparing a suitable order.

CHAIRMAN PALLADINO: Yes, I think they're working on it.

GOVERNOR THORNBURGH: If I might, Commissioner
Bernthal, the original August 1979 order contained the
following language, which indicated that at least at
that time, the Commission felt that the funding was an
important component of any restart decision.

It said, then, "The licensee shall demonstrate his managerial capability and resources to operate Unit 1 while maintaining Unit 2 in a safe configuration and carrying out planned decontamination and/or restoration activities."

It seems to me that the recognition then that the licensee should have the resources could easily be extended to all other interested parties, including those of us who have no legal responsibility to contribute to the cleanup, but who have done so in order to coalesce those who do have it, in a workable plan to fund the cleanup.

COMMISSIONER BERNTHAL: Let me make one other comment, to respond somewhat to Commissioner Asselstine's early comments.

It is so easy around here, I think, to be distracted by the question of whether we are carrying out adjudicatory proceedings or legislative proceedings, whether we're lifting suspensions, whether things are or are not being litigated and subject to cross-examination.

I just want to assure you, Governor, and others that the principal issue which you raised in your statement, that of resolving the safety issues before restart, should be the single issue, and I believe that

remains before us. And in the Commission's judgment, certainly in my judgment, if those safety issues have not been resolved, whether it's lifting suspension or any other device that we could talk about here, I have to agree that the most important thing is not whether it's legally possible or easier to lift the suspension than to grant a new license.

The important thing is that we not, by procedural contrivance, try to do something that we would not normally do.

And I can assure you that we're not going to do things that way here.

COMMISSIONER ASSELSTINE: I agree.

CHAIRMAN PALLADINO: Yes.

GOVERNOR THORNBURGH: I don't take that assurance lightly, Commissioner, and I thank you for it.

CHAIRMAN PALLADINO: I think I gave similar assurance with regard to the issues themselves. Any other questions or comments?

COMMISSIONER ZECH: Let me just say that Governor, I thank you very much for your coming today and your statement and your comments have been certainly very helpful and excellent.

I really appreciate it. Certainly my concern in considering this very important issue is going to be

what's the right thing to do, what's the right thing to do.

(Applause.)

COMMISSIONER ZECH: And you have given us your thoughts on that, and certainly your emphasis on public health and safety will be something that I will be factoring in to my thoughts, too. And I thank you very much for coming today.

COMMISSIONER ASSELSTINE: Governor, I join my colleagues as well in expressing my appreciation for you coming today and for the statements that you've made. It's very helpful to me.

GOVERNOR THORNBURGH: Thank you.

CHAIRMAN PALLADINO: We all thank you, Governor.

GOVERNOR THORNBURGH: Thank you.

CHAIRMAN PALLADINO. We appreciate your coming.

(Applause.)

CHAIRMAN PALLADINO: I u derstand you cannot stay, but if any members of your staff...

GOVERNOR THORNBURGH: I am sorry, and I apologize to the Commission and to the other witnesses who were here today.

We have a very serious flooding problem in Western Pennsylvania that I'm going to be leaving here to visit with some folks out there who have another kind of

disaster to cope with.

But my staff will be here, and we'll look forward to continued interchange with the Commission and its staff, and with those who are interested in the resolution of this problem.

CHAIRMAN PALLADINO: Thank you, Governor. We'll give the Governor a chance to leave, and then we'll call the licensee representatives forward.

(Brief pause.)

CHAIRMAN PALLADINO: I wonder if I could get your attention, please. Would you please come to order. I wonder if at this time we might have the representatives of GPU Nuclear join us at the table.

(Brief pause.)

CHAIRMAN PALLADINO: Mr. Kuhns, and Mr. Clark, we are pleased to have you here for your presentation, and I'll turn the meeting over to you at this time.

MR. KUHNS: Thank you, Mr. Chairman, commissioners. I'd like to say in the beginning that we'd like to reserve about five minutes for rebuttal, if we may, and we'll try to pace it accordingly, to get through with our statements as fast as we can, covering the key points we believe in this complicated issue.

I am Bill Kuhns, chairman, chief executive officer, of GPU, director of GPU, director of GPU Nuclear,

Chairman, chief executive officer of the GPU-3 Public
Utility Operating Companies, the licensed owners
of the Three Mile Island plants.

With me as Mr. Philip R. Clark, on my left, president, chief executive officer, and director of GPU Nuclear Corporation, the licensed operator of Three Mile Island.

Mr. John O'Leary, chairman of the GPU Nuclear Board wished to be here today to address you. However, this meeting was scheduled while he was abroad, and he was not able to arrange to return for the meeting.

We believe that you now have ample basis for lifting your 1979 shutdown orders on the undamaged TMI Unit 1 and respectfully urge that, in fact, you are obliged to do so.

Our basis for this belief has been provided most recently in our filing of July 26, 1984. There are extraordinarily voluminous materials dealing with this matter before you, including those presented to the Licensing and Appeal Boards, and in the filings and presentations to this Commission itself.

It is not possible to comment at this hearing on each of the issues which have been raised. We have, however, previously submitted written comments on each as they relate to the issue before you today.

The fundamental management issue which the Commission is called upon to decide in this proceeding, is whether there is reasonably assurance that GPU.

Nuclear can and will conduct its licensed activities in accordance with regulatory requirements and can and will operate TMI-1 without undue risk to the health and safety of the public.

Stated differently, whether the management-related concerns that gave rise to the 1979 suspension orders have been satisfactorily resolved.

We submit that there is today, in place, a GPU

Nuclear organization fully staffed with highly

qualified personnel, structured to provide the

appropriate checks and balances both internal and

external, and with established policies and procedures
to provide such assurance.

Our presentations today focus on the GPU Nuclear organization that is now in place, and the evidence that it is effective and satisfies the concerns that led to the 1979 immediately effective shutdown.

Basically, during the last five years, we have established and staffed a new company, GPU Nuclear Corporation, devoted entirely to...

(Audience expresses negative feelings.)
CHAIRMAN PALLADINO: Order, please.

MR. KUHNS: A new company, GPU Nuclear, devoted entirely to our nuclear activities and nothing else.

It is one of the most sweeping changes made by any U.S. utility following the TMI-2 accident.

With regard to the proper utility organization to run nuclear facilities, the Kemmeny Commission, the Presidential Commission, made some recommendations that are included in my printed statement. I won't reread them.

But we do believe very sincerely that the establishment of GPU Nuclear Corporation has been fully responsive to their recommendations.

Figures One and Two, attached to my statement, show schematically the relationship of this new subsidiary to GPU system.

As shown there, the owners of the GPU nuclear facilities have assigned to GPU Nuclear full authority and responsibility for safe and effective operation of all of their nuclear activities.

GPU Nuclear has no other responsibilities. The company has been approved by all cognizant regulatory bodies, including the NRC, which issued the necessary license amendments for TMI and Oyster Creek in January 1982.

Its activities are carried out under the direction of

its own board of directors, which has an outside chairman, Mr. O'Leary, and three other highly-qualified outside directors.

Messrs. Clark and Kentner of GPU Nuclear and representatives of GPU and the plant-owners round out the 11-person board.

The three outside directors, other than the chairman, form a Nuclear Safety and Compliance Committee of the board.

That Committee has been given the outside staff resources necessary to independently monitor our operations.

Figure Three shows the membership of the board and the Nuclear Safety and Compliance Committee.

Figure Four shows the principal elements of the board's role.

We believe that the outside directors bring to GPU Nuclear new experience, judgment, and values. They provide added assurance of full external visibility and objective influence on all aspects of GPU Nuclear activities.

Two of them, Ms. Laney and Witsig, are here today, and will be pleased to comment or respond to any questions you may have.

The third, Mr. Humphreys, president of United

Nuclear Resources, simply couldn't be with us today.

The extent of our commitment to fulfilling our nuclear responsibilities is evidenced by the greatly increased resources we are provided.

There are now over 2,600 full-time GPU Nuclear people. In addition, Figure Five shows the financial resources we have applied.

This represents a major and increasing proportion of the total systems resources and these resources have been made available during a very difficult period of overall financial restraints on the GPU system.

The organization is fully in place and functioning.

Results of these changes are demonstrated by the performance of the organization.

Extensive evaluations by NRC staff has reflected in the last two self-evaluations of TMI-1, show overall performance well above average.

INPO evaluations have also been favorable. Also, as I told you in November, Admiral Rickover evaluated our organization and people and concluded, quoting, that "based on the assessment of GPU Nuclear Corporation organization and its senior management as reported herein, the team concludes that GPU Nuclear Corporation has the management competence and integrity to safety operate the TMI-1 plant."

The admiral returned with his staff in April 1984, and again concluded, "GPU Nuclear Corporation actions at TMI-1 reveals the corporation has made significant and noteworthy progress toward adoption of the recommendations of the earlier report.

The corporation has also strengthened its top management by restructuring its board of directors to include board members from outside the corporation with particular technical experience and expertise in the nuclear power field.

These actions of the GPU Nuclear Corporation management give further evidence of their commitment to safety restart and operate the plant."

I want to comment directly on the indictment of Metropolitan Edison in relation to leak rate testing at TMI-2 prior to the accident. That was a very painful and humbling experience.

(Audience laughter.)

AUDIENCE MEMBER: What do you think it was to us?

MR. KUHNS: It was a very painful and humbling experience for everybody. The behavior identified by the government in that matter is totally unacceptable.

Such conduct will not be tolerated. GPU Nuclear has made that policy clear to its people. In addition, they have put in place extensive safeguards designed to

prevent such behavior.

With regard to operation of TMI-1, the U.S. attorney who returned the indictment made clear that there was no involvement of any kind by the officers and directors of GPU Nuclear or the directors of Metropolitan Edison Company.

Further, Figure Six shows graphically that the senior Metropolitan Edison management responsible in 1979 for the operation of TMI are not involved in GPU's nuclear activities today.

Specifically, four levels of management. The Med Ed president, the Med Ed vice president of generation, the Med Ed TMI station manager, and the Med Ed unit manager levels for both TMI-1 and TMI-2 are not associated with GPU Nuclear in any capacity.

The focus of this meeting is TMI-1, but certainly the cleanup of TMI-2 is of great importance to all of us, as emphasized by the governor this morning.

I am pleased to report that during the last several months, there has been good progress made on both cleanup and the funding of the cleanup.

My letter to you dated June 20 stated, "I believe from the point of view of both schedule and provision of funding, we are moving responsibly to carry out the project as fast as practical."

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Since then, we have successfully removed the reactor vessel head. I again assure you that we will continue to do everything we can to assure the safe and timely cleanup of Unit 2.

I recognize the recent correspondence between Governor Thornburgh and you, Mr. Chairman, on possible relationships between the cleanup and the funding of TMI-2 on the one hand, and the restart of Unit 1.

My letter to Governor Thornburgh dated July 20, attached to my testimony, provided directly to him information on those matters.

A copy of that letter is attached. In it, I noted that a subcommittee of the TMI-2 Safety Advisory

Board had been commissioned to provide independent confirmation of the safety of TMI-1 operation during the cleanup of TMI-2.

We've just received that report. It has been provided to the Commission, to the NRC staff, to Governor Thornburgh, and the other parties in the TMI-1 restart proceeding.

It provides a current evaluation which supplements the prior findings of the ASLB. The conclusions of the subcommittee report include, and I'm quoting, "During the last month, the subcommittee and its staff have reviewed the potential for accidents in Unit 2 causing

unsafe conditions to develop in TMI-1. We find that in their present condition, the two plants are nearly completely isolated from each other.

And thus, the potential for interactions between the plants is very low. (Still quoting). Even using what we believe are very conservative calculations, we can find no events that would produce contamination levels in TMI-1 nearly high enough to deny operator access to the plant.

We conclude that even in the most serious events, the plant corld be shut down and safely maintained in a shutdown condition.

(Still quoting.) No credible accidents in TMI-2 were found that could threaten safe shutdown of TMI-1. It is our believe that in its present condition, TMI-2 is less of a risk to safe operation of TMI-1 than if it were a plant operating at power.

We therefore believe that the existence of TMI-2 in its present condition is not a valid technical reason for delaying operation of TMI-1."

Let me say in closing, gentlemen, how conscious we are of the importance of a proper attitude and a strong sense of responsibility throughout any organization that manages nuclear power facilities.

We accept responsibilities for our deficiencies

revealed by the TMI-2 accident. We were responsible for training the TMI-2 operators.

Their training was inadequate. We accept responsibility for operator cheating on exams.

Moreover, the inadequate pre-accident TMI-2 leak rate test procedures and the unsatisfactory administration of those procedures were our responsibility.

Against that background, other issues have understandably assumed greater importance and received greater attention than in most cases detailed investigation has found to have been justified.

But the fact remains that we have made mistakes. We blame no one but ourselves for those mistakes. We have been humbled, we have been humiliated.

We have no vestige of corporation or individual arrogance in our management. But we do respectfully suggest that the crucible of these proceedings demonstrates that we have learned from those mistakes and have brought into being a strong nuclear organization that has benefited from that learning.

The organization which Mr. Clark will now address more specifically has a singleminded dedication to safety, excellence, and responsibility.

We believe we deserve your confidence. Thank you.

And I would ask Mr. Clark to proceed.

CHAIRMAN PALLADINO: Thank you.

MR. CLARK: Chairman Palladino and commissioners, I am Philip Clark, president, CEO, and a director of GPU Nuclear Corporation.

I will address in more detail the organization and management of GPU Nuclear and the resources applied to TMI-1 as well as the significance to your shutdown orders of ALAB 772 and the recent OI reports.

In summary, we believe you have before you ample evidence of two facts. First, that the questions and concerns which caused the shutdown orders of July and August 1979 have been resolved.

Second, that we have and we have demonstrated the ability to operate TMI-1 safely and at the same time, clean up TMI-2.

The major lessons from the TMI-2 accident were not, of course, the hardware lessons. They were people-related lessons, the need for the utility to have substantially greater numbers of its own technically qualified people to effectively manage and direct its nuclear activities, for greatly improved training, for improved procedures, and for greater formality and discipline.

The lessons from both the accident and such events as the pre-accident leak rate practices at TMI-2 and

the cheating incidents in training in early '81 and before, also show the need for checks and balances and other safeguards within the organization designed to actively seek out and identify potential problems so they can be properly addressed.

Perhaps most importantly, there must be full recognition and acceptance throughout the organization of our responsibility to fully protect the health and safety of our workers and the public and to provide full, open, and timely information about our activities.

I believe that all those lessons are recognized in the GPU Nuclear organization and in our selection training of our people.

Figure One shows the mission of GPU Nuclear. This mission was established at the very inception of the company.

It's widely publicized throughout the organization.

And the primacy of our responsibility to protect public alth and safety is clearly established there.

Figure Two shows the major elements we designed into GPU Nuclear to address the unique requirements of nuclear power.

Some of those are full-time organization solely dedicated to nuclear generation, increased on-site

technical and management resources, strong central technical control, full-time on-site management for plant operation and maintenance, independent expertise and management for engineering, radiation protection, and other disciplines, extensive checks and balances.

Figure Three shows the organization of GPU Nuclear which reflects those elements. Of the 12 senior persons in the organization, eight, including me, Mr. Kentner, my deputy, Mr. Huckel, the director of TMI-1, joined the GPU system since March 1979.

Three of the remaining four had no involvement with Metropolitan Edison Company. These are all highly-qualified, experienced technical managers who have demonstrated the proper attitudes and standards in long, successful careers.

Brief biographies of those people, as well as of our board of directors, are included at the end of my statement.

Figure Four shows the total full-time people now in GPU Nuclear and the large portion of those having technical background and experience.

These people represent major increases in the capability applied to operating GPU Nuclear plants.

That chart shows 2,637 total people, 646 people having professional technical degrees, and over 7,600 years of

experience of those professional technical people.

Figure Five shows the GPU Nuclear people applied to TMI-1 today, compared to those applied by Med Ed in 1979.

Overall, there are now two and a half to three times as many people applied to TMI-1 than before the accident, with an even greater increase in key areas.

That table shows 915 people applied today, compared to 315 in March of '79. Of the 435 key people, three-quarters are new to the GPU system since March of 1979.

Mr. Kuhns' statement that this is a new company is borne out by all of the above.

As one example, there are now 106 full-time people on our GPU Nuclear training staff, with over 50 applied to TMI-1 training alone.

To address the Appeal Board remand on the significance of the cheating incidents in early '81 and before, to our training, I reconvene the Operator Accelerated Retraining Program Committee which testified before and was relied upon by the ASLB.

Its report has been provided to you and to the parties. They had a lot of conclusions, but I believe four of the most pertinent are as follows.

The committee is pleased at the response of GPU Nuclear training and education department to the

recommendations contained in our ED report. It feels "the progress has been outstanding, and that the GPU Nuclear training and education department now ranks among the top utility training programs in the United States.

*The management of the training program recognizes its responsibility associated with the cheating incident.

It has taken specific steps to correct the situation and are dedicated to assuring that it never happens again.

The examination development, control, and security procedures are more extensive than any that the committee has seen in industry or academia.

Finally, the bottom line, as far as the committee is concerned, is that the GPU Nuclear training program produces qualified operators and it is adequate to support the restart of TMI-1.

I add here, not in my prepared statement, that the committee has been asked to continue its reviews. I met with their chairman, Dr. Eurig, last night.

The committee has been at TMI Monday, Tuesday, and the members and Dr. Eurig are there today. I wanted to hear first hand their latest conclusions.

They have been talking to the operators and the

management in order to assess not just the program but the results.

He advised me that their continuing review beyond that reflected in their report further confirms their conclusions.

Dr. Eurig is with us today if there is any desire to refer questions to him.

With respect to our overall training program, the latest TMI-1 self-report states, "The licensee's training program is extensive, the general employee training program attempts to instill a high regard for quality in all workers of TMI-1.

A large number of dedicated training personnel, detailed procedures, specialized manuals, technical forces, and well-maintained and retrievable records reflect a high degree of management attention to implementation of the training program.

Control procedures established last year in response to ASLB decision on the reopen proceeding on cheating were well-thought-out and properly implemented.

Interface between the plant staff and the training staff is evident, with frequent feedback of practical information into the training program.

We are also well along in seeking INPO

accreditation of our training programs for licensed and non-licensed operators and STAs.

We have taken the initial steps, and as I recall, the INPO team will be on-site in about October of this year to look at those programs.

With regard to the other two issues remanded by the Appeal Board, leak rate testing and the D-cam mail gram, the information now available to the Commission is ample, we believe, to conclude that they do not pose (inaudible) to restart and safe operation of TMI-1.

With regard to emergency preparedness, the SALT Report (phonetic) have rated TMI-1 as a category one for the last two periods.

The latest report states a November 16, 1983 exercise indicated significant improvement from the '82 exercise.

Licensee management demonstrated a thorough understanding of previously identified deficiencies, and was responsive in getting them corrected.

Additional improvements can be made in the areas of information flow, response implementation, and scenarial development.

The licensee's emergency preparedness program is supposed by all levels of management and is adequate to protect public health and safety.

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We recognize that staff certification of open items for restart such as emergency planning, must address the adequacy of off-site communications in light of the ASLB finding and the FEMA report.

To address this item, we arranged in June and July for the involved off-site counties to participate in two FEMA-observed communication drills.

We believe those drills provide the basis for staff certification.

To the extent the staff believes it needs more information, major exercises are scheduled in early fall.

In any event, Commission action to lift the immediate effectiveness of the orders should provide and I think must provide in some cases for subsequent completion of staff certification and should not require prior certification of this or any other of the few remaining open items.

We believe the recent OI reports and the NRC staff's assessment in Supplement V to NUREG 0680 provide no grounds for delaying a decision to lift the immediate effectiveness of your orders.

Our detailed basis for that is provided in our filing of July 26th.

The total performance of GPU Nuclear on TMI-1 as

summarized in the SALT reports (phonetic) states,

"Overall, this assessment found that the licensee is

continuing to devote considerable resources, to improve

performance in all areas of the organization,

management attention in identifying and correcting

weaknesses is apparent from licensee initiatives noted

in the areas reviewed.

Management's commitment to safety is also apparent from their extensive commitment to personnel training, continuing efforts to staff the organization with highly technical, competent personnel, and the implementation of a stringent policy regarding procedural adherence.

The OPE memo of July 12 issue with your notice outlined possible approaches to a TMI-1 decision. In our view, it would be unnecessary and unfair to continue to defer the already long delayed immediate effectiveness decision, and thus continue to provide indefinitely an umbrella under which each and every event can be placed.

To do so would continue to compound the already complex and confusing matter of determining whether TMI-1 of the 12 reactor plants of similar design in the United States should alone be prevented from operating.

The lengthy time which has passed has seen the

new issues arise. This is not unique to TMI. You know that additional questions and issues are always being raised and addressed at nuclear plants.

The Commission has established procedures for dealing with such issues. These should be applied for TMI-1.

Staff certification, steam generator license amendment, any other items needed for actual restart should be addressed on their merits in the common sense of the word as we all understand it, but not within the framework of the immediate effectiveness of your 1979 orders.

We believe that the additional hearings which the Appeal Board has directed are not warranted and have petitioned the Commission to reverse the Appeal Board's directive.

If the Commission does not overrule the Appeal Board, any hearing should proceed expeditiously. In any event, any deficiencies in the record the Appeal Board has before it have been resolved in the additional materials presented directly to the Commission, so as to allow a Commission decision on restart.

Therefore, any such hearings and a decision thereon should not be a precondition to lifting the 1979

orders. We strongly urge you to make a decision now to lift the immediate effectiveness of your 1979 orders.

The issues which form the basis for immediate effectiveness have been investigated, discussed, litigated at length, and we believe resolved.

There is before you ample basis to make a favorable decision on those orders.

Thank you.

CHAIRMAN PALLADINO: Thank you, gentlemen. I have four questions I'd like to ask. Three of them are related, as a matter of fact, I think, focus on one point, and that is the question of management integrity.

Let me start with those three questions. The first question refers to your comment about the leak rate testing at TMI-2 prior to the accident.

I'm not looking at the details of that. What I'm looking at is the fact that even though the government said the top management wasn't involved, the board wasn't involved, yet it seems to me that top management has a responsibility to be giving oversight to the operations such that these things are not likely to develop and are caught in the bud.

Again, I'm not sure that I have understood what it is that could provide us the assurance that such a

thing won't take place again. And I'm going to go on to my second question, because I think these three questions are all related.

I come to the point of the staff's statement that its position in the management competence phase of the hearings would have been different had it known of the information as it now is.

There again comes the question of even in more recent times, we have not had the full flavor of what's been going on in GPU such that when the staff comments in a hearing on GPU's organization, or on the overall organization, this management, that it can't be sure that all the information is provided.

In other words, here it goes back and says, "Had we know all these things that we've learned during the past few years, we would have made different comments on management."

And here again, say, even in more recent years, has the organization been such that we do get forthcoming information so that we don't have to backtrack on decisions or so that we can be assured that things don't happen such that they might lead to serious events.

And my third question, that relates again to this same matter, has to do with a question, I think, I raised at

the November meeting, the question of responsibility and fault.

You have admitted again that you're responsible, but during the November meeting, there was a tendency to look back and say, "But we were not at fault in all aspects with regard to the TMI-2 accident."

And I'm not interested in going back to see whether you were at fault or not, but I am concerned that in extending this concept forward, that this responsibility that you're reasserting is strong enough so that there aren't weak links so that you can say, "Well, we really weren't at fault on that. There was information we might have been provided, but it wasn't provided to us."

My feeling is that it takes a provocative stance on the part of the management to make sure it has the information necessarily to do the job.

And so I'd like to get comments on these three questions. They all focus to the degree of confidence that we, as a Commission, can have in the forthrightness, integrity, and the pursuit of sound management in handling TMI-1 if it were restarted.

MR. KUHNS: Let me start on that, Mr. Chairman.

MR. CLARK: I'd like to comment also.

MR. KUHNS: Absolutely, and I'd like you to

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describe the things that are in place that we think specifically would prevent the kinds of things from happening again that happened before.

We do accept responsibility for that leak rate testing mess. It was a mess, and the procedures were not enforced.

The people were not impressed, apparently, with the seriousness of that test. A key point is those people are not there. We have made changes.

(Audience aughter.)

CHAIRMAN PALLADINO: But the top management is still there, at least very high.

(Audience applause.)

CHAIRMAN PALLADINO: This is where I'm trying to go. How can it be assured that perhaps the casual reaction to what's going on in the organization might lead to future problems?

MR. KUHNS: The top management of the plant is not there.

CHAIRMAN PALLADINO: Well, go ahead.

MR. KUHNS: Now when you say top management, are you talking about Kuhns and DeCamp (phonetic)?

CHAIRMAN PALLADINO: They are certainly included.

MR. KUHNS: As senior officers of the system, and they are there, but we have made changes which we think

are very extensive. I described them as I went through my presentation.

Certainly a key change, from my standpoint, was initially the formation of GPU Nuclear. This is a separate...we didn't have that before.

We had the operating company who had the responsibility for operating TMI-1, Metropolitan Edison, running that plant along with a lot of other responsibilities.

The president of that company had not only that responsibility, but his fossil plants, his building, his total across-the-company operations.

We have changed all that. We decided, wisely, I believe, that nuclear power can't be effectively managed that way, so we set up this separate single focused organization called GPU Nuclear.

And how have we staffed it? With new people and a new board of directors, in the sense that we have brought on that board a new chairman, Jack O'Leary, three new outside men, Messrs. Laney, Witsig, and Humphreys, who comprise a Nuclear Safety and Compliance Committee, who have in turn hired consultants to maintain a presence in that plant, to maintain a separate view of what's going on, so that there are...and Phil can talk in more detail about other

checks and balances that we have introduced that would assure us and you, we hope, that that kind of disregard for procedures could not occur, or if it did occur, it wouldn't occur for more than a few minutes.

It would be immediately caught by the various review groups and procedures that we now have, external visibility, reports to the public of all that goes on, and to this Commission. That just can't happen. It's a new organization.

CHAIRMAN PALLADINO: Let me be more specific.

After the accident, yes, there was a reorganization.

My problem is, is the top management set up in looking at the organization, such that it recognizes precursors to situations, so that any slovenly practices are stopped before they bring about an accident?

MR. KUHNS: Absolutely. Absolutely.

CHAIRMAN PALLADINO: And if there's a need for reorganization to take place before an accident, not after.

MR. KUHNS: Absolutely. Mr. Clark can talk more specifically about these checks and balances. Last night I was reading...we get biweekly reports now, the top management, including myself, of the total nuclear program bifunctions.

And we have off-shift reviews by plant personnel,

off-shift plant tours they make at high levels of management. They make a record of this. They note deficiencies.

There is a follow up on those. That never occurred before. We didn't have that kind of a thing in place. Phil can more specifically identify the other checks and balances.

MR. CLARK: Let me pick up first on what I think is a complementary comment with regard to the senior management involvement in the last several years to what Mr. Kuhns said.

There is very heavy involvement by the senior management, including the board of directors, including Mr. Kuhns and Mr. DeCamp, and very clear evidence to me that they are interested in knowing what the problems are, and interested in having us very aggressively seek out those problems.

I firmly believe that that's an important element, and I tried to address that in my prepared remarks where I talked about the lesson from the leak rate question and the cheating incidents, and that lesson being the need to actively and aggressively look for potential problems so that they can be addressed. And that is done actively.

I'll give you some more examples than Mr. Kuhns

gave, including reflecting those problems up through the board of directors.

The board goes to the sites, each plant, twice a year. They interact with the people, not only the management, but the people down in the organization.

In addition to the off-shift management tours that Mr. Kuhns referred to, we have QA shift monitoring people on every shift.

Their job is to look for procedure compliance problems that may be there, identify them, document them so they get resolved.

We have full-time on-shift STAs, different than some other people. We have an independent on-site full-time safety review group dedicated to looking for problems.

The checkers, if you will, which include QA, the safety review group, have an exercise access to the top management.

The QA director is in with the board of directors quarterly. There are just all kinds of steps taken and we do fully recognize that management has the obligation to seek out potential problems and address them. And we have a great many mechanisms in place.

I made up a list one time at the board's request of such mechanisms, because the board was concerned as to

whether we had that. So there is, in fact, a memo from me to Mr. Kuhns saying, "Here are the things that I think help protect us against the kind of thing that happened in the TMI-2 leak rate."

So he was interested to ask, and I was able to satisfy him that there are a great many such steps in place.

With regard to the staff comments on what they would have said earlier if they knew what they know today, I think the staff has to speak to exactly what that meant. I won't attempt to.

A great deal of what they know today that they didn't know then goes to pre-'79, and I think it is not of great pertinence to today.

With regard to information flow, I do recognize the importance of that. You will find that my prepared statement does speak directly to that.

You will find that the instructions down through the organization do speak directly to that, and you will find that in a day-to-day implementation within the organization, which I think is what really counts, it's not the policy you put out, although that's important, but it's how it gets implemented and how they see the management feels about it.

I think you will find that that shows management

interest, involvement, exertation, to keep the NRC and the public fully and openly informed.

And I think there's plenty of evidence of that. In terms of responsibility, I've spoken to this Commission before in terms of this question and said there's no question in my mind but what I am and feel and will act responsible for everything that happens within the nuclear activities. And I repeat that assurance to you today.

There's just no question about that in my mind, there's no question about that in my experience and training, and in my own approach to the job, and I might add, in the approach to the job of the people reporting to me.

Those people, and again, I tried to say this in my prepared statement, were selected on the basis not only of experience but of proper attitude on responsibility toward public health and safety.

If I made the right notes, your last comment was does management have to take the initiative and find out, and I think I've already addressed that as I have gone through.

So I hope that's response, Mr. Chairman, to all three of the questions.

CHAIRMAN PALLADINO: I was really looking to, does

the board have a mechanism now and is it working, such that it can identify problems that may require change in the organization, major change in the organization, based on the information they get, without waiting for an accident to happen to bring that forth.

I gather the Nuclear Safety and Oversight Committee is an important ...

MR. CLARK: There's an additional one. We have a general office review board, which is not in our tech specs, senior outside people involved in that.

They report to me, but their reports go to the board of directors, and they meet every year with the board of directors just so that there is an opportunity for real dialogue at that level.

There are just, Mr. Chairman, a whole variety of mechanisms. We really have been extremely conscious of the need to look for and be able to address potential problems and not wait until we have something go wrong.

MR. KUHNS: Let me put it in its worst light, if I may. I think we have, and I think it's a test of the adequacy perhaps of the controls and the oversights and the visibility that we've provided.

I think we have an organization set up here today that would make it impossible for any of us as individuals to mess it up.

(Audience laughter.)

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MR. KUHNS: I really mean that, and I say I put it in its worst sense, and the cheapest sense, if you will.

But there are enough checks and balances that if any one of us or more of us are negligent or lack the diligence that we ought to have, it will be revealed.

It will not be covered up, and it certainly is not going to affect the safe operation of that plant.

Would it help, Mr. Chairman, to have Mr. Laney, the chairman of that committee, say a few words in terms of his...

(Audience expresses negative feelings.)

MR. KUHNS: ...visibility or his perception of how he sees his role and the independence of that board?

CHAIRMAN PALLADINO: I think in the end it's going to come down to see the extent to which the board is effective in its operations. Let me not dwell anymore on that for a moment.

MR. KUHNS: You had one other question.

CHAIRMAN FALLADINO: One other question.

MR. KUHNS: Yes, sir.

CHAIRMAN PALLADINO: It had to do with the funding of TMI-2 cleanup.

MR. KUHNS: You also asked the question about the

law suit.

CHAIRMAN PALLADINO: Well, I was asking the question about looking to the future as a question of responsibility and fault, clear enough so that we're not going to find...

MR. KUHNS: I would like to make a comment on that, if I may, because it was a subject of discussion at the last meeting.

I want to very clearly separate our sense of responsibility and specifically the law suit that we have pending at this time against the U.S. Government. We do have an obli...

CHAIRMAN PALLADINO: Excuse me. Ladies and gentlemen, I appreciate that you have great interest in this matter.

But it does help if we can keep down the background noise and response, emotional response, to what's being said.

Thank you.

MR. KUHNS: Thank you, Mr. Chairman. Following the accident, several investigations, as you know, were made, the Presidential Commission. the Kemmeny Commission, the Rogivin Commission and other investigations revealed deficiencies in the process that went beyond our own responsibility.

It doesn't detract one bit from our responsibility for what happened. I want to make that perfectly clear.

However, it did reveal an area that the lawyers, in looking at it, and pursuing their sense, our sense of our obligation to our customers and our stockholders, to pursue possible claims that we may have, found this violation, suspected violation of, I think, Section 208 of the Energy Reorganization Act, and it was on that basis that that law suit was filed.

That legal issue really has nothing...does not involve the exercise by the NRC of its regulatory responsibilities or authority.

It's separate and apart from that, and it does not affect our perception, our understanding, of our own responsibility.

CHAIRMAN PALLADINO: I wasn't thinking of the law suit per se. I was thinking where the acceptance of responsibility is complete enough so that it goes to exercising initiative in getting any information that you need to being aware of the circumstances going on in the plant, either organizationally or substantively, in the technical matters.

And it's that little gnawing feeling that I still have that I was trying to explore, so that if something

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goes bad, it doesn't automatically mean that it isn't the organization's fault.

MR. KUHNS: No. sir. No. sir.

CHAIRMAN PALLADINO: I understand in accidents there may be accidents ...

MR. KUHNS: We recognize. Mr. Chairman, from the top down that TMI-1 has to be the best run nuclear facility in the world, bar none. It's got to be, and it will be.

(Audience laughter.)

CHAIRMAN PALLADINO: Let me go to my fourth question. That had to do with funding.

MR. KUHNS: Yes, sir.

CHAIRMAN PALLADINO: You're quite aware of the governor's plan and all the participants involved in leading the funding of the cleanup, but at this moment, I know it's difficult to talk about the amount of short fall, because it's ever changing.

But I was wondering if you could comment, the extent to which GPU can make commitments to make sure that the funds needed for cleanup will be there as needed, so that the cleanup can go on expeditiously.

MR. KUHNS: Yes, sir.

CHAIRMAN PALLADINO: I think it would be very assuring if we had the strong commitment from GPU

Nuclear on making sure that the funds will be provided for cleanup on a timely basis.

MR. KUHNS: We make the...my letter to Governor Thornburgh, dated July 20, which is attached to my statement, covers that point, I hope. We can amplify it to the extent you wish.

CHAIRMAN PALLADINO: Maybe it's worth highlighting.

MR. KUHNS: Well, yeah, let me just do that. We make the flat-out committment that the earliest cleanup completion within the confines of our total obligations and capabilities is in everyone's interest, our efforts to date in our future plants are directed toward this objective.

We unequivocably accept as our number one responsibility the protection of the health and safety of the public and our workers.

This has been and will continue to be our policy no matter what the pace of the cleanup may be. So we make that flat-out committment.

We absolutely will provide the resources needed to protect the health and safety.

Now beyond that, to the extent of affecting the pace of the cleanup itself, that letter does address that, and attaches a schedule.

And Mr. Peterson received this information within

the NRC organization, which shows the projected TMI-2 spending and the sources of that funding through 1990.

The cleanup is virtually completed by the end of 1988 or early into 1989, but we take it out through 1990.

We show on that schedule the sources, and we feel more assured about the industry share of 150 million than the governor expressed here today.

His doubts are justified. I don't mean to suggest anything other than that. But we believe that the industry has now put in place a program with its voluntary piece, supplemented by the diversion of every dues by Pennsylvania and New Jersey utilities to a total of 25 million a year for six years, and that's in place, and that's going to work, we believe, very strongly.

There is a slight update to the governor's number this morning. We have provided him with that number. We didn't get to him before we had an update this morning.

The total commitment at this point is a reaffirmation, if you will, \$46.6 million, and there will be a follow up program to raise that as closely as possible to at least the roughly 70 to 80 million that had been committed prior to that.

But that level will then determine the extent of the (inaudible) dues diversion. We are assured by this program of 25 million a year, and that is reflected in this schedule.

The schedule shows the expenditures, the sources, as I say, through 1990. It indicates on the bottom line, cumulative company advances.

Do you have that, Commissioner Bernthal? This is attached. There it is.

MR. CLARK: The one that runs across the page, table.

MR. KUHNS: The last attachment to my statement.

Do you have it, commissioner? It shows that company
advances...

MR. CLARK: Do you have them?

CHAIRMAN PALLADINO: Is this it?

MR. CLARK: Yes, yes.

MR. KUHNS: Bottom line shows increasing company advances cumulative, 7 million the end of this year, 18, 35, 68, 86, 60, and then it comes down because we're spending less than we're getting.

It does show a net advance of \$38 million. And certainly we would commit to provide those funds. We do say in my letter to the governor, and it is true, that we do not see our ability to advance those funds

aggragating an advance of \$86 million by '88 without the return to service of Unit 1.

That is not said as a threat. It really isn't.

But we have to have...we have a dual obligation of maintaining service to our customers and we have to be able to meet all of these public demands.

And the return to service of Unit 1 is in the interest of the financial capability to fully fund this cleanup at a pace that we all want to maintain.

The customers, upon the return of Unit 1, of course, will see a rate reduction of \$80 million a year.

They're helped by that. That's an economic advantage.

(Audience laughter.)

MR. KUHNS: If TMI-1 never returns to service, it will have to be replaced with a coal plant, probably, another nuclear plant, perhaps, which will cost ...

(Audience applause.)

MR. KUHNS: ...two and a half to three and a half billion dollars. This plant is on our books at something around \$400 to \$500 million, an enormous bargain for the customers.

(Audience laughter.)

MR. KUHNS: The economic impact of restart is not the major

concern of this Commission, we recognize, but all things being equal, it certainly is something not to be ignored.

And in the context of funding, it's very relevant.

We have cash problems. You've probably noticed

increasing earnings reports that we've issued in recent

months.

Our earnings are improving. But our cash position is still very tight. And this displays somewhat the tightness of that position.

CHAIRMAN PALLADINO: Well, I think we're going just a little beyond where I wanted to go. I was looking for ...

MR. CLARK: May I comment just a minute?

CHAIRMAN PALLADINO: ... a commitment that would help this Commission, help the governor in his thinking with regard to funding of the TMI-2 cleanup.

MR. CLARK: But ...

CHAIRMAN PALLADINO: And that's the thrust of my question.

MR. CLARK: Could I comment, Mr. Chairman? One part of the comment is history, and the other is current.

In, as I recall, September of 1980, the
Pennsylvania Public Utility Commission issued an order

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or memorandum or something which said in essence, no penny of rate-payers' money shall be spent on cleanup.

The day that was received. I issued to the director of TMI-2 with the agreement of the management at that time, an order which said, "Continue to do everything required to protect public health and safety."

GP Nuclear is charged and has the authority to spend without prior authorization from the owners funds required to protect the public health and safety.

And I think both of those, both what happened in '80 and that situation today, go quite directly to what I understand your concern to be.

(Audience applause.)

MR. KUHNS: My only qualification, not to what Phil says, but to what I was saying earlier is that without the restart of Unit 1, the pace of the cleanup will be affected, in my judgment.

CHAIRMAN PALLADINO: Okay.

MR. KUHNS: The health and safety of the public will not be in jeopardy as a result of that. We will see to that.

CHAIRMAN PALLADINO: Well, one of the concerns I have is that the plant is in a condition for which it was not designed and there's always a possibility of deterioration with time.

And if the cleanup is delayed, then the likelihood that something might deterioriate that we would rather not have deteriorate would increase, and that's why I'd like to make sure it goes on expeditiously.

MR. CLARK: Well, we obviously are concerned with getting on with it as quickly as we can. I think it is important, also, Mr. Chairman, to recognize that while the plant is in a condition it was not designed for, the elements of an off-site threat, which are how much radioactivity is there, how much energy is there in order to disperse that radioactivity, and the combination of those two, is far, far different today than an operating plant than even in 1979, so that when you try to assess the risk, you know, there is a very low level of risk.

And I think your own staff would recognize that and certainly the assessment we had from the Safety Advisory Board, they chose to emphasize that.

That is not to say that we are not interested and do not intend to clean it up as quickly as we can. I mean, that is what needs to be done, and what we intend to do.

COMMISSIONER BERNTHAL: Let me just interject...
CHAIRMAN PALLADINO: Go ahead.

COMMISSIONER BERNTHAL: ...a comment. What you say

is true, of course, that one can... I should say, one can look at risk, but there also is the important question of public confidence.

I have to recall the time some months ago, I guess, when I spoke with some of the local residents of the area.

And I suppose that's something that should be obvious, even to the outside observer, but the point certainly had not been made before, as pointedly and as clearly as it was there, the impact that the presence of the uncleaned-up plant has on public opinion with respect to restart of the other plant.

Whatever the other issues might be, I would just urge you to be especially cognizant of that perception on the part of the public.

MR. CLAPK: I accept that. I agree.

COMMISSIONER BERNTHAL: It's extremely damaging to your position, I would say.

MR. KUHNS: I should add something else on cleanup, because the schedule I referred to has DOE funding shown beyond a period presently authorized.

DOE has no funds authorized for the cleanup beyond fiscal '85, which ends in October of '85.

We have shown some numbers based on our estimate of what we would hope could be put in place either by the

normal DOE budgeting process or through the congressional route.

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In addition to that, there is still \$15 million a year of Pennsylvania customer money which is conditioned upon restart of Unit 1, under the Thornburgh plan.

They were putting up a given amount totalling 246 million total. Fifteen million a year of that is still conditioned under a Commission order upon the restart of Unit 1 and will not be available until then.

So both of those factors introduce some imponderables that just make it impossible for me to make the pledge that I'd like to make, we absolutely can assure the present pace and total funding of the cleanup.

(Audience interruption.)

CHAIRMAN PALLADINO: Excuse me. We're going to have to keep order in the room, so I would appreciate your cooperating.

Commissioner Asselstine, do you have a question?

COMMISSIONER ASSELSTINE: I have just a couple of questions. Let me follow up on the cleanup funding questions briefly.

CHAIRMAN PALLADINO: Let me explain about time.

The Commission will take all the time it wants in

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questioning the presenters, and to do less than that would not permit us to discharge our responsibilities.

So I'm not going to curtail the discussion. I will watch for the amount of time the people take in making a presentation.

Go ahead, Commissioner.

COMMISSIONER ASSELSTINE: On the cleanup funding, would you agree with the point that Governor Thornburgh made that the key missing element right now is the fulfillment of the utility pledges or commitments in terms of the funding, that the other elements are pretty much there, that's the one that's still missing?

MR. KUHNS: The other elements are pretty much there. I have a greater degree of confidence about the industry share than he does, for reasons that he stated.

I understand those reasons. He tends to take the position that, "I won't believe it until I see the money flowing."

The program, as it's now been put in place, provides for the beginning of the flow of funds, January 1, 1985.

But I feel confident the program is there and will be followed.

COMMISSIONER ASSELSTINE: I was wondering if you

had any thoughts or ideas on what else might be done, both to get a higher level of commitments, up to the kinds of levels that you're talking about here on your chart, and also to make sure that the money in fact comes through, that people fulfill on the pledges and commitments from the other utilities?

I know you've spoken to the EEI board from time to time about it. Others have, as well. I wonder if you have any other ideas on what can be done to make sure that that \$153 million or \$200 million, whichever it is, is a firm commitment, and in fact will be delivered upon.

MR. KUHNS: Well, I have no doubt that those who have signed the commitment are all good companies.

They're substantial organizations of integrity, and they will stand behind it.

We had a couple drop out for reasons of their own problems, and you might guess they're largely nuclear problems.

They're struggling with plants throughout the country and we had two drop-outs. One was not included in the original pledge. One was and dropped out.

But I feel confident that those who have pledged and will pledge will maintain that pledge. I don't see what we can do beyond that, other than to trust them.

We're never going to be in the position with the cleanup, as I think Dr. Snyder said at one hearing but all the money's in the bank.

We feel very confident about the cleanup on the basis that it's been developed...funding, on the basis that it's been developed, with these uncertainties that I've mentioned.

The DOE funding is important, and we're working there to try to get a kind of a commitment beyond fiscal '85 that we need.

We think it would be tragic for the U.S. Department of Energy to walk away from that site when the centerpiece of the cleanup is about to be accomplished, namely, the fuel removal.

And the Japanese involvement, of course, will be there. So we think it's an important role for the DOE to continue, at least for two years beyond fiscal '85.

We show that in our projections. The restart of Unit 1 is a condition that is important, we believe, again, to the pace of funding.

MR. CLARK: Commissioner, I wonder from the question whether the current plan under which the Pennsylvania and New Jersey utilities have said they will make up the short fall of the EEI pledges so as to assure that 25 million a year does flow starting in

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January '85, whether that plan is really understood.

To the extent that that's the case, and that's what they have said, then the absolute level of the EEI pledges per se does not affect the money which will flow to cleanup.

And I think that's an important point, and a change from before June 'til today, and does give us, and I think should give you considerable added confidence that money will start flowing at that rate in January of '85.

COMMISSIONER ASSELSTINE: So it's not a question of whether the money will be available; it's a question of who will ultimately end up paying for it.

MR. CLARK: I think in substantial essence, yes.

MR. KUHNS: The dues, just to put that clearer in numbers, the dues of the Pennsylvania and New Jersey utilities to aggragate about \$25 million a year to the extent that the voluntary program provides funds, the diversion will be less than their full dues.

COMMISSIONER ASSELSTINE: Yes.

MR. KUHNS: But that relationship is important, I think, to the integrity of that total \$25 million.

COMMISSIONER ASSELSTINE: Uh-huh.

CHAIRMAN PALLADINO: More questions?

COMMISSIONER ASSELSTINE: I had two other

questions, not relating to the cleanup.

CHAIRMAN PALLADINO: Go ahead.

COMMISSIONER ASSELSTINE: Bill, you've mentioned from time to time the importance of the new organization.

MR. KUHNS: Yes, sir.

COMMISSIONER ASSELSTINE: That's really the centerpiece of what you think ought to be the basis for the Commission's confidence.

MR. KUHNS: Yes, sir.

COMMISSIONER ASSELSTINE: To what extent do you think that the occurrence of the operator licensing cheating incidents and GPU response to it, and the occurrence of the non-compliance procedures on TMI cleanup, TMI-2 cleanup, and GPU response to that, are fair tests of the new organization?

To what extent, can I look at both of those events, in making, do you you think, in making a fair appraisal of how effectively the new organization is going to be able to, one, anticipate and avoid problems, and, two, respond promptly and effectively in dealing with problems, even when they're difficult to deal with?

Even when it requires replacing people, firing them, cleaning house, correcting serious problems in

terms of attitudes and performance. Do you think those are two fair tests?

MR. KUHNS: The first one was the cheating?

COMMISSIONER ASSELSTINE: Operating license cheating incidents after the accident.

MR. KUHNS: After the accident in 1980...

COMMISSIONER ASSELSTINE: And the non-compliance with the procedural non-compliances on the TMI-2 cleanup.

MR. CLARK: Polar crane kinds of procedure issues?

COMMISSIONER ASSELSTINE: That's right, and how you responded to both of those incidents.

MR. KUHNS: Certainly, taking them one by one, the cheating incident I would say certainly occurred before we had this organization in place.

People who managed the response largely aren't with GPU Nuclear. I don't think that's a test of the new organization.

The polar crane situation, talked about that before. We did...I did acknowledge that there was some confusion, at least, between the GFU presence and the Bechtel presence and the interrelationship procedures and questions of which procedures should be followed.

And it was a failure. It was an absolute failure that we have to take responsibility for.

The investigations proved that it didn't impact the safety of the operation, and, of course, the subsequent head lift demonstrated the integrity of the crane and what happened, admittedly, there were deficiencies in following procedures.

I think the organizational interface there explains that to some extent. I would ask Phil to comment whether he feels we have now in place, and I know we spent an enormous amount of time and indeed, told the supervision management to do nothing but work on procedures for a period of time to get that subject behind us.

MR. CLARK: Let me also add a thought on the cheating incident. I think we all know that the cheating, in fact, took place on an NRC exam. Our operators cheated.

We very quickly did fire them. We did undertake our own investigation into the cheating, and while I didn't claim then, and I guess 1'm still not an expert in investigations, we tried to do a thorough investigation.

And on balance, the licensing board found that the company had carried out a satisfactory investigation, although they pointed out some areas where they thought we could have done more and better.

I think on recent incidents that have come up such as the polar crane issue, the TMI-1 leak rate, we have chartered a more thorough investigation, we have gone outside to bring in experienced investigator. And we think that he's done a very thorough job.

So one part of our response to that is to recognize better the depth and breadth and strength, if you will, of an investigation and how to carry it out, and I think we've demonstrated we've learned that lesson.

I think another part of the "did you learn anything" was the focus that we put internally with the training department management.

And this was the board of directors to me and me to the training department management, an assessment of whether we thought they understood their responsibility, I think exactly analogous to the question you people have been asking us today, whether they accepted their responsibility, whether they were facing up to it.

I would suggest that the report you have from the OARP committee today, where I charged them to look at that amongst other things, goes very directly to that question.

It says that the training management does accept their responsibility, they are dedicated to preventing

it, and they have in place methods, systems, controls, unequal to anything the committee has seen.

So I think that in a total sense of looking at the response of the organization to those issues, that I think you should, and not at all uncomfortable, with your judging the organization and its response on the basis of our total response to those events.

COMMISSIONER ASSELSTINE: I have just one more question.

CHAIRMAN PALLADINO: Go ahead.

COMMISSIONER ASSELSTINE: It picks up on the comment that Commissioner Zech made to the governor about we're going to do what's right.

It seems to me that when this proceeding was all begun, that the Commission basically had promised at that time that the information on which these...that would be used to resolve these issues in the proceeding would be given in the hearing.

You've pointed to a lot of information this morning in your statements that you think serve as a basis for lifting the shutdown order.

And I think it's fair to say a lot of that information isn't in the record.

You mentioned the Rickover Report, our SALT (phonetic) report, the follow up reviews of your

training program, a number of those, and some of our Office of Investigation reports as well.

Why isn't it the right thing to do now for the Commission to say that before TMI-1 is going to be restarted, that information will also be tested in the hearing, at least on the key issues that the Appeal Board, at least, feels are not fully resolved at the present time, based upon the record that now exists?

MR. CLARK: Commissioner, I know there is some legal arguments with regard to procedures, etc.

COMMISSIONER ASSELSTINE: (inaudible)

MR. CLARK: I'm not ...

COMMISSIONER ASSELSTINE: That's right.

MR. CLARK: I was going to say I'm not familiar with those, I won't attempt to speak to them. I think we have in our filings.

I think on a merits basis in the common ordinary

English language sense of the word, that the issues

which formed the basis for the order, have been

addressed, and have been extensively litigated and there is

great deal of information in the record, and the

licensing board has in fact issued its partial initial

decisions.

Now when this thing was set up, the plan was to have the licensing board issue its decisions, and

as I recall, the Commission review that, and act within 30 or 35 days.

All right. The licensing board did issue its decisions. They were all favorable to restart, and it's probably at least two and maybe three years since then.

So you know, the issues have been looked at, they have been litigated, they have been tested in cross-examination.

I personally was part of that. The rest of the people in the organization were part of that. The GPU Nuclear organization, as it stands today, was litigated in that hearing.

So in that sense, the thrust and the intent and the merits as seen then, and I think, as legitimately seen today, do call for lifting the shutdown orders.

To the extent there are other issues, there are other forums, other proceedings, other methods to deal with them, that's the way you are dealing with the same kinds of issues with almost everybody, if not everybody else.

And we suggest that that's the appropriate way to deal with the merits of the TMI-1 issue.

COMMISSIONER BERNTHAL: I just point out that...and

I'm still learning on this, as at least one of my

colleagues is, that one of the wonders of our system that we've developed is that, as I understand it, the Appeal Board remand to the licensing board deals with a record in this matter that was closed in December of 1981.

Isn't that right?

COMMISSIONER ASSELSTINE: I think that's right.

COMMISSIONER BERNTHAL: In fact, the issues being discussed here, while two and a half years of other information, extra record, to be sure, has been developed in one way or another, procedurally in this agency, in this particular case, we're arguing about a remand that involves a record that was closed in December of 1981, to me as a non-lawyer, that's quite remarkable.

But I won't try to stand in judgment of how you deal with that.

I'd like to ask just a couple of questions myself here, Mr. Chairman.

CHAIRMAN PALLADINO: Go ahead.

COMMISSIONER BERNTHAL: I have to say that it just stretches credibility for me, at least, that here we are five years after the event, talking about whether there's confidence that money will be available, \$3 million from the Japanese one year and \$10 million

somewhere else, whether or not justifiably. I gather that you have considerable confidence that the money in fact will be there.

But wa're still talking about scenarios where perhaps it might not be there. That, I think, is just evidence of a failure of government, if I might say, at all levels to deal with the problem.

And that failure continues, and there's plenty of blame to go around, and I've referenced some of the blame that I think the NRC has to share.

Let me ask a hypothetical question here, and it's hypothetical because I don't know whether the legal basis exists.

Suppose that we found that there was the legal basis for the Commission to issue an order that the cleanup be carried out expeditiously and forthwith.

Now it's not our responsibility to worry about money in these matters.

Could you respond? You may need to consult your legal counsel here, but I'm curious to know whether you have any contingency plan or whether there has been any thought given to a device, financial device, by which that procedure, that cleanup procedure could go ahead. How would GPU seek to comply with such an order?

MR. KUHNS: And what would the order again be, Mr.

Commissioner?

COMMISSIONER BERNTHAL: Simply that the cleanup be carried out forthwith and expeditiously, in other words, that there...

MR. KUHNS: Well, that's subject to interpretation.

COMMISSIONER BERNTHAL: There would be no...what I

want to say is that there would be no room left for

stretching out of the schedule based on flow of funds

from one source or another.

I understand the delic a legal position you're in here, and you may wish to consult before answering, but let me pose the question.

MR. KUHNS: Well, the response has to be qualified in the sense that we can't do more than we can do, if you will.

We can't spend money we don't have. We now have...our only access to outside capital, other than our revenues from customers, is the revolving credit agreement with banks.

That credit agreement is designed, and the levels are established, to maintain the solvency of the organization during this period.

COMMISSIONER BERNTHAL: So you're simply saying that you could not comply with such an order unless other funding that we've described becomes available on

a timely basis.

MR. KUHNS: We would do everything we could to comply, Commissioner. We would certainly try, as a part of that response, to establish to your satisfaction that the health and safety is not in jeopardy, as a result of this delay.

I don't think we're talking here about a site that has to be cleaned up by this date or all hell's going to break loose.

I don't think anybody takes that position. We all want it cleaned up, and it isn't going to get any better while it's waiting to be cleaned up.

But I think the kind of reviews that we've made now by this subcommittee of the SAB indicates not total comfort, we're not relaxed about the cleanup, but it certainly ought to be viewed as giving some time to accomplish the job, and let these cleanup sources move along.

AUDIENCE MEMBER: How?

MR. KUHNS: We're not ... and they're there. They really are there. I have to keep saying to you that from our standpoint, Unit 1's restart is important, and you can't pay much attention to that, I realize that, in terms of the safety question.

But it's got to be part of my answer to that kind

of an order.

COMMISSIONER BERNTHAL: Let me ask...

MR. CLARK: I'm sorry. I think what you asked was a hypothetical question.

COMMISSIONER BERNTHAL: It was.

MR. CLARK: Which was, if you issue us an order to tell you what we have both said here, to tell us to do what we have both said here, and said we're doing our very best to do, what would we do.

And I think the answer is we would continue to do our very best to clean it up as fast as we can, which is what we have been trying to do.

And I think the greater assurance of industry funding which exists today did not just happen.

It is not solely the result of Governor Thornburgh. It is not solely the result of this Commission. It represents the results of, among other things, a major, major effort by GPU management to get that funding source in place and to convince the other utilities in Pennsylvania and New Jersey to contribute.

So I think Mr. Kuhns' answer that we would do our very best to comply with your order is what we would do, without being able to be more specific.

MR. KUHNS. And lack of funding, if you will, or the amount of funding, has not been one of the primary

restraints to the progress of the cleanup.

There have been other restraints, regulatory, understandably. I'm not complaining, but they have been there.

We lost about a year on the whistleblowing situation. Now there were deficiencies there in terms of procedures, and we concede that. We admit responsibility for it.

But it wasn't endangering safety. That doesn't excuse it, but that whole process took about a year and delayed that cleanup for just about one year.

Now those things can continue to happen. We are going to get probably more surprises along the way.

(Audience laughter.)

MR. KUHNS: There are people working...

CHAIRMAN PALLADINO: Excuse me.

MR. KUHNS: ... to prevent the restart of Unit 1, and messing up the cleanup is an effective way to contribute to that, I believe.

Now that's getting a little accusatory, and I don't mean it to be in that sense, but I think we have to recognize where we are today and the job we have to do and to get on with it.

I read a line last night that I will inject, if I may, and I hope it isn't misunderstood, in an editorial

I read last night. I don't agree with many editorials these days.

But this one, in talking about TMI, said, "'Those who cannot remember the past are condemned to repeat it, 'is George Santiyanta's much-quoted statement.

There is much truth in that. The problem at TMI-1 today, however, is less a failure to remember the past than a refusal to face the present.

Santiyanta, if he had seen the machinations concerning TMI-1, might have said, 'Those who use the past to avoid the present are condemned to create new problem."

I think there is a thought there. I think we have to get on with this at some point. We have a new organization. It's highly qualified. Let us prove it. It's not in any way endangering health and safety.

CHAIRMAN PALLADINO: Okay. You have more questions?

COMMISSIONER BERNTHAL: I have one other question that I'd like to ask. I think we've...

CHAIRMAN PALLADINO: I think we've...

commissioner Bernthal: ...beat the financial issue enough here, perhaps. This again may be a difficult question to answer, but we've talked a lot about management changes and the fact that, as you've

represented it, you have an entirely new organization.

Can you outline for us perhaps with numbers, if you have them, off the top of your heads, how many of the people that were involved in any way in plant operations or plant management at TMI-2?

And we all understand that there are two, you yourself, Mr. Kuhns, and Mr. DeCamp, that are still at least in some way with the organization.

But aside from those two, can you tell me how many such persons now have any management responsibility or any direct responsibility for plant operations at TMI-

MR. CLARK: I think I can give you at least some elements of the answer to that, Commissioner. First is that with the single exception of Mike Ross, who's been thoroughly discussed, nobody licensed to operate TMI-2 is or will be licensed to operate TMI-1. Now that's a group of people.

I was looking for the figure one, I believe it is, or one of the figures to Mr. Kuhns' statement which you have before you...

COMMISSIONER BERNTHAL: Yes, I saw that one.

MR. CLARK: That takes the senior levels of management and shows the extent of their involvement.

I believe that in probably December of '83 or

January of '84, in response to a question raised by Senator Spector at a hearing he held in Harrisburg, I provided to Mr. Denton a letter which went through all of the people, and that picked up clerks and utility workers, all of them.

As I recall, there were of the order of...I'm going to say 15. but I'm not certain.

COMMISSIONER BERNTHAL: This includes everybody in the plant?

MR. CLARK: Yes, yes. Now, you understand, going back to '79 and saying out of all the people on the island, you know, who did exactly what, there's a bit of uncertainty.

But I don't think in terms of the total numbers, that you would find relevant, that the order of 15 people who had been supervisors or above, that is, excluding people doing the hands-on job and looking solely at the people who supervise, manage, and direct, which we...who are in any way involved in TMI-1, and then we ran down exactly what each of those people was doing.

I think there is a real balance to be drawn between genuinely having new management and direction, and ensuring that standards and discipline are understood and enforced, and retaining some detailed knowledge and

familiarity with the plant and the equipment to be operated.

And I think we attempted to draw that balance most directly, first in June of 1983, where we talked about the people who would be removed from any oversight checking, QA, safety review and there are no people who had prior Med Ed involvement of the exempt people, there were none of those in that oversight groups at TMI-1.

And retaining in some of the doing groups, some of the people who had the experience, on which there is no evidence of wrongdoing, and yet providing additional oversight by our shift monitoring engineers and others, and we really have been, for five years, emphasizing to all of the people involved, what are the proper standards, what's expected of them, and I think demonstrating in the day-to-day disciplinary action and what not that we really mean it.

And so I suspect you'll find, if you want to count all the hands-on people, out of the 900 people applied to TMI-1, I suspect there are 200, 250 maybe.

But you have the additional people, and you have five years of learning and involvement. One of the figures in my own statement says we have 915 total people working on TMI-1.

We labeled 435 of those as key. That's managers, technical professionals, licensed operators, and there's a little longer list.

Of those 435, 235 were not anywhere in the GPU system prior to March of '79, so that's somewhat over half. brand-new.

And 100 additional, bringing the total to over three-quarters of those were not with Med Ed prior to March of '79, and so were not involved in TMI in any way.

And I suggest that that's a preponderance of new people, and I also think that the assessments available to you of how this organization has performed in the recent past are all favorable.

You have your own SALTs, you have the INPO evaluations, you have a great many things, which say that the results which, I think, are important in the decision, that those results are good.

COMMISSIONER BERNTHAL: Okay. I think maybe we can hear more from staff about this later. But let me summarize.

You say that there are 15 people at the supervisory level and above in the entire organization now at TMI-1 that were involved prior to that with TMI-2?

MR. CLARK: I said there is a letter in the record

to Mr. Denton, and my recollection is it's 15.

COMMISSIONER BERNTHAL: More or less.

MR. CLARK: Yes. I would not want to be held to my memory on that number.

COMMISSIONER BERNTHAL: And that there is one person that would be licensed for operation at TMI-1, and what is the total number of people in your operating core?

MR. CLARK: Well, the licensed operators we have for TMI-1 now, as I recall, is about 33, of which half are SROs and half are ROs.

That number goes up and down a little, but that's about the right number. We are on six shifts.

COMMISSIONER BERNTHAL: Okay.

CHAIRMAN PALLADINO: Thank you. Lando, you have some questions?

COMMISSIONER ZECH: One quick comment and one quick question. The comment is I'm not sure of the appropriateness of the Commission involving ourselves in the funding question.

I recognize that that's not our specific responsibility. On the other hand, it seems to me that perhaps in Congress, I know, sometimes they use the term "the sense of the Congress" by making a statement that would be in support of some issue.

And I just don't know if perhaps it might be appropriate for our Commission to at least express the sense of Commission as regards encouraging the funding more expeditiously for TMI-2 cleanup.

I just offer that as a comment. I would certainly have to defer to others who might look into that.

The question for Mr. Clark, would be, you've stated, I think, very strongly that you accept the responsibilities for TMI-1 and TMI-2.

Do you feel at the same time you're accountable for those two very important nuclear power plants?

MR. CLARK: Yes, both on the basis of having taken the job and on the legal basis of being the licensed operator, and the president and CEO of the company, on a whole variety, as well as my own personal conviction.

There's no question in my mind but what I am accountable.

COMMISSIONER ZECH: And my last question, then, would be, having acknowledged your responsibility and your accountability, do you think you have the authority to supervise and monitor and control the TMI-1 and TMI-2 organizations in order that the public health and safety will be completely protected?

MR. CLARK: I do. And I have now, when I commented to an earlier Commission meeting, perhaps emotionally.

that I have been now with the GPU system four and a half years.

And I not only have the legal authority but I have that period of time of evidence of complete support of my exercising that authority.

COMMISSIONER ZECH: That's all I have, Mr. Chairman.

CHAIRMAN PALLADINO: Okay. Thank you. Any other questions?

COMMISSIONER ASSELSTINE: No.

CHAIRMAN PALLADINO: Gentlemen, we thank you for your presentation and bearing with us while we asked questions.

Two housekeeping matters. First, I neglect i to mention in my opening remarks the regrets of Commissioner Roberts of not being able to be here. He's on official travel fulfilling a longstanding commitment.

He wants me to make sure that you understand his absence is not due to a lack of interest, and he will be reading the transcript very carefully.

Second matter is the fact that we're running way overtime. I am going to suggest that we now adjourn for lunch, if the Commission is willing, and return at 1:30 so that we'll have a little more time to deal with

matters this afternoon. If that's agreeable?

COMMISSIONER ASSELSTINE: That's a good idea.

CHAIRMAN PALLADINO: Then that's what we'll do. We'll recess until 1:30.

(Whereupon, the meeting recessed, reconvening at 1:30 p.m.)

CHAIRMAN PALLADINO: This is a continuation of our meeting in which we are receiving oral presentations by the parties on issues related to Three Mile Island Unit 1.

Next on the agenda are presentations by Norman and Marjorie Aamodt, and I wonder if they might join us at the table.

(Audience Applause.)

CHAIRMAN PALLADINO: Let me repeat once again that we need to maintain order. We appreciate the interest that is shown by various participants, but I would like to withhold any applause or demonstration, so we can proceed with our meeting.

MR. AAMODT: Mr. Chairman, commissioners, we genuinely appreciate the opportunity to be here today.

I've only one preliminary remark, and that is that we would reserve some of our time for rebuttal. There were many comments made this morning that we felt were, in our judgment, gross misrepresentations, and we would

like the opportunity to respond. Therefore, we have a relatively brief statement we'd like to make.

It's a very difficult one, because we're aware of the reaction concerning it, the controversy. But we feel that this issue is the most important issue that has been and will be brought before you.

I was struck, as we sat waiting this morning, at Commissioner Zech's comment. That's the right thing to do?

And I would like to extend that comment one word further, and say what's the right thing for this Commission to do first. That's really the issue before us.

We reviewed your order and its attachment, and it's our judgment that the proposed paths toward a decision fail to take into account that most important element that we would like to discuss today.

We served on the Commission on June 21st of this year a motion where we demonstrated that people northwest of TMI were exposed to high doses of radioactivity during the initial days of the accident, at that time, when GPU alone was monitoring the releases.

Credible, solid citizens, voluntarily and independently described experiences which are clearly

radiation effects. I hope you had the opportunity to read their affidavits.

I would like to point out to you that in the audience today there are several of those people who wrote and signed those affidavits.

And I want you to seriously consider what you're doing if you let anything take precedent to seeing whether or not what happened at Three Mile Island was the cause of a cancer mortality rate six to eight, and I believe now, ten times the state average.

As perhaps you noted from our data, that the data didn't quite span ten years, and today we learn that two more people died of cancer on those streets.

What greater responsibility do you have than to determine whether or not it was caused by the accident at Three Mile Island?

There is one other thing I do want to point out to you, and I don't want to be melodramatic, but I do want to remind you that among the individuals sitting out hare, are individuals who, on the first day of the accident, never in their lives before, never, on that first day of the accident, had sunburn over their arms and their face, developed nausea and diarrhea, subsequently had rashes, went to their doctor, and was told by their

doctor these are classic radiation symptoms, but it couldn't be the effect of radiation because the NRC told us that not enough radiation got out.

I submit, gentlemen, that at this moment, we may be talking about the biggest cover-up that our government has been engaged in.

Our motion was that you examine the integrity of licensee to determine whether or not on that first day those records which were presumably lost, were they indeed lost?

Do you know that? Or were they destroyed? Was that extrapolation of 40 rems over Goldsboro, was that legitimate?

There's been a lot of argument. Or perhaps, as some news media people have suggested on occasion, maybe this high mortality rate was the result of earlier releases from TMI-1. Maybe it was.

The fact of the matter is that the cancer mortality rate on three hilltops west of Three Mile Island is on the order of ten times as high as the cancer rate across Pennsylvania, and it's your responsibility to assure those people either that it didn't come from Three Mile Island or that if it did come from Three Mile Island, that suitable remedies are available to them.

And at the very least, they have the opportunity to know that today somebody cares and somebody will tell them.

And the little children, there are people there.

We can take you to these people who have rashes on their feet when they walk barefoot in their gardens, children, who when they crawl on the ground have rashes on their arms when they crawl on the ground, dogs who have rashes on their bellies when they crawl on the ground.

We can show you those people. They're your responsibility, nobody else's. They're yours.

I'd like to bring another matter to your attention with regard to this issue. As you know, as I said, we presented you with a motion.

I presume you're aware of the staff's response and the licensee's response and the Commonwealth's response.

The staff's response was, "Don't pay any attention to it. There's nothing new here." I submit there isn't. They know about it, just like they knew about the Hartmond issue and deceived even you.

The licensee said, "There's nothing new about it.

Don't pay any attention to it." You're right. There
was nothing new about it. They knew about it.

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The Commonwealth's response, the only response we got, was not one in writing, but just one by George Tokahara.

His response was, "Don't pay any attention to it. The investigators weren't scientific qualified."

I didn't spend ten years on the staff of Bell Labs to not be qualified to run a simple study like this, nor did my wife. That was a perfectly valid test.

And yesterday we were visited by two members of the Health Fund, very qualified people, Dean Abramson and the other fellow's mame I don't recall.

MS. AAMODT: Dr. Kohn.

MR. AAMODT: Dr. Kohn, who came because they had read the study, because they recognized its validity, because as they put it, it was provocative.

They're going to look. I suggest you had better look, too.

We're at the point here of enormous law suits, if nothing else. The integrity of the Commission is at stake on this one.

It is your responsibility to guard the health and welfare of people around that island, and for five years, people have suffered the effects of radiation damage and died, and this agency hasn't taken a positive step.

I'll tell you one step they did take recently.

Someone from your staff was out in that area, inquiring of residents as to where we took our soil samples and where we were going to have them analyzed.

Why didn't they come to us? Why didn't you come to us? Why didn't anybody come to us? Do you think we may have the biggest cover up that we've seen in the Federal Government for a long, long time?

As Governor Thornburgh stated, the nuclear industry is at risk, and I've heard it said before, and it applies today, that when an individual dies because of this accident near Three Mile Island, Three Mile Island will die, too.

Thank you.

(Audience applause.)

CHAIRMAN PALLADINO: Thank you. Did you have additional comments?

MS. AAMODT: No, I did not.

CHAIRMAN PALLADINO: Okay, thank you.

MS. AAMODT: I just wanted to make one correction.

At the beginning of Norman's remarks, he said ten years when he meant five. It was a five-year study of the last five years.

MR. AAMODT: Yes.

CHAIRMAN PALLADINO: Okay. Thank you. You

mentioned a cover up, Mr. Aamodt.

MR. AAMODT: I didn't hear you.

CHAIRMAN PALLADINO: I'm sorry. You mentioned a cover up, and I'd like to just explore it for a minute.

MR. AAMODT: Yes.

CHAIRMAN PALLADINO: As I recall, at TMI-2, there were measurements by the licensee, there were measurements by the state.

I think there was monitoring by EPA. I'm sure there was monitoring by DOE or NRC. I don't recall all of them.

MR. AAMODT: EPA monitors it to this day.

CHAIRMAN PALLADINO: Yes, EPA monitored. And yet you imply that all these people got together and brought about a cover up. I don't know on what basis you say that.

MR. AAMODT: Yes. My son came home from seventh grade this year with a text, with a section prepared by the Commonwealth of Pennsylvania, in which the Commonwealth of Pennsylvania was teaching the children in our school, and I suppose schools around the Commonwealth that no radiation got out of Three Mile Island that no one was injured.

We know that George Togahara set up some studies.

No new studies were set up after 1980. The people who

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we talked to brought their case to the Commonwealth.

One of the individuals in this room wrote a letter to

Governor Thornburgh outlining his symptoms, to which he
never got a reply.

There were 6,000 phone calls received at, I believe, it was DER's hotline during the time of the accident.

Would you believe that they've all been destroyed? You know that there is this problem with the filter at Three Mile Island.

Nobody can satisfactorily explain that. All the explanations we've gotten, Chairman Palladino, are explanations to explain why nothing got out.

There is an interesting dichotomy here. Both the fortunate and unfortunate aspect of this is that people tend to believe government, and when government accepted at face value, whether or not they intentionally covered up, licensee statements that nothing got out, the people believed it.

My point is, I just cannot believe with all those people in the plant and we know of at least one individual who can testify to the fact that radiation records were destroyed, and I'm sure you can find more, but nobody's looked.

And I think the failure to look, one would have to

objectively say, at least ask the question, wouldn't that be part of a cover up?

MS. AAMODT: I want to add, before your response,
Chairman Palladino, that numbers of citizens brought to
the NRC, as well as to the Commonwealth, their
experiences of the reddening of the skin, metallic
taste, diarrhea, graying of the hair, loss of hair,
hearing rustling of the trees, and a rain-like sound
coming through the trees particularly on Friday of the
accident.

We have people who told us about two experiences with a plume, and some of these people took these experiences to NRC.

We also...NRC did nothing to look into these experiences, but simply told the people that they couldn't have been from radiation.

EPA has taken soil samples. We went to their offices several weeks ago and asked for samples in areas near where we made our studies, and they can't find their sampling data now.

At first they said...

MR. AAMODT: They're missing.

MS. AAMODT: ...this would be provided, but they can't...

CHAIRMAN PALLADINO: The data or the samples?

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MR. AAMODT:

The data.

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MS. AAMODT: That they can't locate the data in the computer unless we could provide them with the exact

days on which the sampling was done.

CHAIRMAN PALLADINO: Well, I still come back, though, to your statement about cover up. At that time, I was not involved with the NRC, but I was heavily involved with the state.

I am particularly aware of your radiological protection in the state and I think Pennsylvania was and is fortunate in having a group that's as knowledgeable as that group is.

I've never heard of them trying to cover up or not getting...or making objective measurements or evaluating measurements objectively.

MR. AAMODT: Let me give you another ...

CHAIRMAN PALLADINO: I am not aware of any basis on which they ever were involved in a cover up.

MR. AAMODT: I hope that's true. But we cannot help but conclude personally that this is the case. I'd like to point out another example, though, of something that would lead in this direction.

As you recall, in our motion, we presented an affidavit by Dr. Tunkle, who was professor emeritus of botany at Rutger's, the world's leading authority on

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radiation effects on plants. The samples that we brought to Dr. Gunkle had been presented to George Togahara.

The Commonwealth knew they existed. Your staff knew that they existed. None of you, if you'll forgive my saying it, did a damn thing.

CHAIRMAN PALLADINO: Well, that's something perhaps we ought to check.

MR. AAMODT: I think.

CHAIRMAN PALLADINO: Yes.

MR. AAMODT: But I think you can understand ... (Audience applause.)

MS. AAMODT: It wasn't very difficult when Mary Osborne, who is sitting in this auditorium, showed me in her home one night the abnormal plants, having lived on a farm for over 20 years and having only seen one aberration in a plant on our farm, which was, by the way, right after the Three Mile Island accident, it was in the spring. It was an asparagus plant.

Only ever having seen one, I was very much impressed with Mary's box of samples, and within three days, I was in Dr. Gunkle's home and was able to have these effects verified.

So it was not very difficult to have this information verified or to recognize it as something of

importance.

CHAIRMAN PALLADINO: Well, it doesn't help in understanding what the basis is for the cover up.

MR. AAMODT: Well ...

CHAIRMAN PALLADINO: At least the allegation of a cover up.

MR. AAMODT: Dr. Palladino, I think it can be very clearly stated. Any professional in his field worth his salt, when he saw those plants, knew that they were caused by radiation.

Any professional worth his salt, when he heard about the effects that the people around Three Mile Island suffered, would at least suspect that they were caused by radiation.

My point is that you have people worth their salt.

The Commonwealth has people worth their salt. Where were they?

CHAIRMAN PALLADINO: Well, I can speak about...

MR. AAMODT: Why weren't they out there?

CHAIRMAN PALLADINO: I can speak about the Commonwealth because I was at TMI for part of that time, with the Commonwealth people.

And I never saw a group that worked harder and more objectively...

MR. AAMODT: And many did. I don't question that.

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CHAIRMAN PALLADINO: So while there may be information that you have that maybe ought to be examined, I never saw the slightest evidence of an attempt to cover up.

MR. AAMODT: That would almost define a good cover up, wouldn't it?

(Audience laughter.)

CHAIRMAN PALLADINO: Well, I don't know. It depends on how you see people work.

MR. AAMODT: Yes.

MS. AAMODT: Well, Chairman Palladino, what do you do with the fact that there are many, many people who brought their concerns which doctors identified as high radiation related concerns, to the Commonwealth and the Commonwealth did not follow up on that?

This was brought by way of telephone call, and by letter, and by personal encounters with Dr. Togahara at meetings.

And these people were told that this was not from high radiation, that they had the same experiences of the NRC staff.

And many of the people in the areas where we surveyed were more willing to speak with us, who were citizens, than they indicated they would be to speak with an agency's personnel, because they've been tired

of being told that they didn't experience what they experienced.

MR. AAMODT: That's what your people told them.

CHAIRMAN PALLADINO: Well, I'd have to go check the records, but I presume these people...and I have no basis for not presuming that these people were giving their best professional opinions when they gave the opinions.

MR. AAMODT: Right.

CHAIRMAN PALLADINO: Well, let me turn to other commissioners and see what questions they may have. Jim, did you want to start?

COMMISSIONER ASSELSTINE: I don't have any questions. I guess I just would make one comment, that you brought to us some information that I think we ought to look at very carefully.

You deserve a fair, thoughtful, well-considered and well-researched response. I think you ought to get it.

MR. AAMODT: Thank you.

CHAIRMAN PALLADINO: Fred?

COMMISSIONER BERNTHAL: Mr. Chairman, I would just ask whether it's appropriate for us to hear from staff or others and see what the response is here.

I mean, there are a number of suggestions made here and information provided. I don't know whether we have

the time or ...

CHAIRMAN PALLADINO: Well, we can proceed in one of several ways. Maybe we ought to proceed with the other presentations but ask the staff to be prepared to comment on it.

commissioner Bernthal: Comment on some of these issues. The only point that I would make is that...and you haven't suggested otherwise, I don't think, is that the question of the missing records is a question that was, in fact, raised by our staff as well, back in 1979, so it's not like, I think, just for the public record, everyone should understand that while you are reraising the issue of the missing records, the staff of the NRC had published in August of '79 its own finding that those records were indeed not available without making any judgment at this point on what the reason of the absence of the records was.

What I would like to hear, and I think the public deserves and you deserve, a response, at least to the extent we can have a response today, to some of the concerns that you've raised here, have our staff respond to those.

CHAIRMAN PALLADINO: I would ask the staff to be prepared to respond to the extent that they can today, and then if the response is not sufficient, ask them to

do more.

MR. AAMODT: We thank you.

CHAIRMAN PALLADINO: Okay. Commissioner? Lando

COMMISSIONER ZECH: Yes, I'd just like to say that

I agree that your thoughts and your allegations, if you
will, or your concerns should be looked into, and
thoughtfully considered, and I would certainly support
doing that.

MR. AAMODT: We appreciate that, sir.

CHAIRMAN PALLADINO: Thank you. Now you have reserved five minutes.

MR. AAMODT: Yes, sir, we have.

CHAIRMAN PALLADINO: Do you want to do that later?

I wonder if we might have the representatives of TMI

alert join us at the table.

Would you please identify yourself?

MS. DOROSHOW: Thank you, Mr. Chairman. My name is JoAnne Doroshow. I represent TMI Alert along with Louise Bradford, who is seated to my left.

We would both like to make short statements today, and we would also like to reserve a short time for rebuttal.

It is the position of TMI Alert that the licensee lacks the requisite character to operate a nuclear power plant.

The basis for this belief is contained in a nearly 200-page petition which we filed with the Commission Monday under the 2.206 of the Code of Federal Regulations.

The petition is to be supplemented shortly with an additional 100 pages or so very shortly.

We believe it is the Commission's responsibility under the Atomic Energy Act to immediately revoke the license of GPU Nuclear to operate TMI-1, and that the Commission should immediately institute proceedings for revocation.

We would like to note several things, in light of some remarks which were made by the licensee this morning and in light of some other documents which have recently come to light.

The staff has now determined that as of late 1981, the company did not have the requisite character to meet the statutory requirements.

Yet they qualify their position, insisting that suddenly, the company went through some sort of germatic change as of January 1, 1982.

There is no conceivable way that this argument can legitimately be made.

Everyone knows that shortly after the accident, the company reorganized structurally. It was the basis of

the licensing board's 1981 decision which supported restart.

As a matter of fact, in the words of former GPUN president, Bob Arnold, words which he spoke to NRC investigators in late last year, he said that, "In July of 1979, we officially integrated the management and technical staff of GPU Service Corporation, which was responsible for the design and operation of TMI-2 until it went commercial in December, 1978, and Med Ed Company, that was involved with Three Mile Island.

That was known as the TMI Generation Group. That
TMI Generation Group was the forerunner of the GPU
Nuclear Corporation which was established in September
1980."

Mr. Arnold said, "I was the head of all of the organizations I described, including president and chief operating officer of GPU Nuclear Corporation."

By the way, Mr. Clark came to GPU Nuclear and assumed responsibilities in January of 1980.

One basis for the staff conclusion that the company lacked requisite character through 1981 was the cheating incidents.

The licensee today told you that the people that were responsible for those incidents and were responsible for the company's response to those

incidents are gone today. That's ridiculous. The people that are still in control of GPU today are the ones who were responsible for the cheating incidents and are responsible for the company's response to those incidents.

In particular, Mr. Clark boasts about the swift action that was taken against these two cheaters who were caught cheating on NRC exams in 1981, Mr. O. and W.

Mr. O. and W. were the only two operators against whom the company took any action after being caught cheating.

For example, neither operators G. nor H., who repeatedly cheated on company exams and perjured themselves during the restart hearings, were removed at the suggestion of licensee management.

G. resigned on October 15, 1982. H. was only removed at the insistence of the Commonwealth of Pennsylvania in June of 1983.

To the extent that G. and H. were disciplined at all, it was only at the specific direction of the licensing board close to a year after the incidents were known to licensee.

The licensing board had serious reservations about licensee's capability of effectively disciplining G.

and H. on its own, since, "according to the board, licensee continues to maintain that G. and H. did not cheat."

Licensee now views their response to the G. and H. issue moot, but the licensee only decides to implement any corrective action after it was imposed by the board, reflecting nothing positive about licensee's character.

The Appeal Board also expressed concern over the adequacy of licensee's response to cheating by operators G.G. and ordered licensee to reprimand him in May 1984.

Regarding former training instructor Husted, licensee's reponse to evidence of Husted's strikingly poor attitude, which should have immediately disqualified him from supervisory duties, was to promote him, first to supervisor of licensed training at TMI-1, and then after the Commonwealth forced the issue, they promoted him to supervisor of non-licensed training.

The Appeal Board flatly rejected the adequacy of licensee's response to this incident, has ordered that he is to be removed.

Further, licensee covered up the incident involving Floyd and O., which occurred in 1979, when the cover up

continued for two years. One is publicly known. The company's response to those incidents was the company investigation called the Speaker Report, which was so disingenuous that it is beyond description, and it reflects very poorly in the Governor's words, "in the extreme on licensee's integrity."

In fact, these incidents resulted in \$100,000 civil penalty against the company, and the licensee resisted paying this civil penalty.

As far as the company's response to the Unit 2 leak rate issue, licensee boasted that the U.S. attorney had assured that there was no involvement of any kind by any corporate officer currently involved in running TMI-1.

In fact, what the U.S. attorney said was that the United States indicted the company for reason, it was to show to the world that the United States of America was not about to pick out a bunch of scapegoat employees when it was really the corporation's responsibility for the misconduct. The corporation is the senior management.

They are directly involved no matter how you look at it.

Further, the U.S. attorney did not address the cover up of Unit 2 leak rates, and if he had, he

certainly would have gotten to the issue of management responsibility.

I don't know what you heard Mr. Kuhns tell you earlier, but what I heard Mr. Kuhns say to you was exactly what he told the press after the company pleabargained in February as to the Unit 2 leak rate charges, and that is that the licensee insists that the leak rates were not falsified and in fact they have never acknowledged that the leak rates were falsified.

It denies culpability, just as it denies culpability and responsibility for just about every single issue and act of wrongdoing that they have been involved with, until basically their license has been in jeopardy.

Most importantly, they have denied culpability for the accident. All of these things speak very poorly for the licensee's current character.

Regarding the new training program, just a word about the new OARP, which you have received, which Mr. Clark spoke of.

The authors of that report qualified just about every statement they can make in there that they did no in-depth review of the training program, including just about every concern raised by the Appeal Board in their decision.

These people made the exact same assurances in 1981 at a time when there was widespread cheating going on, fueled by disrespect for the program, because operators were not being trained to operate the plant.

As of last year, the RHR auditors reported that operators felt precisely the same way about the training program, as it did during the cheating hearings and as it did at the time of the accident, and as it did before the accident, at a time when the company was in direct violation of NRC training requirements.

This fact alone provides one of four bases for the staff's conclusion now that through 1981 the company lacked requisite character to operate the plant.

Mr. Clark also spoke about the STAs, which they now promise are on shift. This was a promise made December 5, 1979, in the context of the company's response to the notice of violation.

You should note that last year the Beta report specifically noted that the STAs were not working out, that the program was just not working. Second...

CHAIRMAN PALLADINO: Where was that?

MS. DOROSHOW: The Beta Management Audit, which came out in early 1983, the Beta Report, which is a subject of some motions to reopen the record in the restart hearing.

MS. DOROSHOW: (Inaudible), of course. This is another subject of the reopen hearings. And I note that Mr. Decamp is perhaps the single most influential person currently at GPU, over in Nuclear Operations at TMI-I.

I would just like to briefly note some remarks which Mr. Kuhns and Mr. Decamp made to NRC investigators very recently in the context of the Keaten investigation.

Mr. Kuhns recently told NRC investigators
"I do think I have a role and that's certainly the
structure that we have today, with the GPU Nuclear
Corporation and its board. And the way we operate
gives me a role even though I am not an officer of the
corporation. I have a presence and I attend all
meetings and I visit all the plants with the management
and supervisory level of the organization and I make
sure that they understand my attitude about this very
important and this very special technology".

Mr. Kuhns also described the fact that he was responsible for bringing Herman Decamp on, who he looks to for "Nuclear advice, counsel and direction". According to Kuhns, "Herman has taken a lead position on the operating matter within the system, nuclear and non-nuclear. He is the man I look to and the Board

NRC/119 Tape 4 C.R. looks to in terms of the op ation of the power plants".

According to Kuhns, he said, my office is a few feet from Herman's office. We work very closely. He, we visit on all major problems daily the way any management runs an organization. Every significant communication that he gets or that Arnold got or that Clark now gets, I am generally informed about without being seen or needed to read all the material, but I am kept informed of all nuclear developments.

Mr. Decamp also told a lie, I've got to believe that I contaminate certain decisions or let me put it another way. I'm in a position where I maybe could have influenced them to go another way.

Clearly, Kuhns and Decamp are still very much in control of this organization. I think one indication may embe the fact that Mr. O'Leary did not show up today to present his view of the corporation and to show the Commission that he feels the corporation has changed and that Kuhns and Decamp are no longer in charge.

As to the receive organization commitments that the company has made, there are just several points that I think are important to be made. First, in order to allow the pre-a cident Unit 2 operators to continue with the company at Unit I, license promoted

some of them to supervisory positions.

For example, former Unit 2 shift Supervisor Zaley (ph.) was promoted to the position of rad waste operations manager at TMI-I in 1982. He left to go to the, to become superintendent of the Titus Station in January of this year, replacing him with former Unit 2 shift supervisor Brian Maler (ph). All of these individuals were on shift at the time the accident and were on shift at the time leave grade falsifications were occurring as well as the licensee's choice to replace (inaudible) supervisor of life and (inaudible) at TMI-I, who was a former Unit 2 operator at Frederick.

Second, Michael Ross who was dual licensed on Unit I and Unit II before the accident is expressly not exonerated by the U.S. Attorney, was not removed from license duties. In addition to the questions about his personal integrity regarding Unit I activities regarding the Unit I leave grade issue and the cheating incidents, it is also significant that not only was there testimony from at least one former shift supervisor that he recalls that Ross and Unit 2 supervisor of operations, Floyd, who you may recall was intimately involved with Unit 2 leave grade falsification, occasionally filled in for the another during vacations. In other words, Ross would take over for Floyd as Unit 2

supervisor of operations.

Moreover, Ross was expressly called over to Unit 2 during the accident as part of the command team supervising immediate company response activities. He clearly was intimately familiar with Unit 2. It's inconceivable that he did not know about the leak grade problems.

Further, it's also true that half of the GPUN Nuclear Vice Presidents came from GPU Service Corporation. GPU Service Corporation managed TMI-2 until it went commercial in December 1978. By that time, the leak grade falsification had already become an established pattern and all major peak (inaudible) events were in place.

These individuals include Mr. Huward (ph) who was Projects Manager for GPU Service at the time the accident. It includes Mr. Wilson who was at the accident, Chief Engineer of GPU Service Corporation for their Generation Division. And it includes Mr. Long is now GPUN Vice President for Nuclear (inaudible). Long was Manager of Generations Productivity at the time of the accident.

CHAIRMAN PALLADINO: Maybe I'm getting the signals...your time is up, but is that based on the reserving five minutes?

NRC/119 Tape 4 C.R. UNIDENTIFIED SPEAKER: No, full time.

CHAIRMAN PALLADINO: Full time.

MS. DOROSHOW: Okay. I will, I will then allow Miss Bradford to make some comments. She has some very important things to say about the steam generators tube hearings and some other issues.

CHAIRMAN PALLADINO: Can we be brief?

in July of this year, the Licensing Board conducted hearings on the steam generator. I might start by saying that the scope of the hearings was so narrow that it was impossible to discover whether there was safety related problems with the repair itself.

MS. BRADFORD: Just recently and, of course,

For instance, the licensee qualified that repair program using archive tubing. That is, steam generator tubings, tubing that has never been in service. That qualification program...questioning on that qualification program was specifically disallowed. The reason that was was because in framing our contentions, TMIA had, using common sense we thought, had decided that the things that we wanted to examine were the post repair testing, thinking in a common sense fashion that it was just normal that having conducted the repair that these testing programs would take place after the repair. And, in fact, the qualification program took place prior to the repair. And it is on

that qualification program that licensee has based its, and the NRC, have based their, their determination that licensee has met the standards for the steam generator.

It was, the licensee has relied so heavily upon the qualification program in order to, to, to qualify the repair that they found that even though the scope of the hearing was, was narrowed, that they could not prepare testimony for that hearing without mentioning the qualification program; however, TMIA was time and again foreclosed from questioning on that particular area.

Some things did emerge at the hearing, however, that have great safety significance or at least raise questions of, of safety. It seems that the licensee did have available to it a mechanism for testing the actual steam generator program, the actual steam generator tubing that will be used in the steam generators.

They had conducted a long-term corrosion test. When questioned by the Board and asked why they did not include mechanical tests in that long-term corrosion test which utilized actual steam generator tubing, they said that it would have required altering the testing fixture. They continued to say that it never even

NRC/119 Tape 4 C.R.

crossed their minds, that it did not occur to them to test the actual steam generator tubing that had undergone the repair process.

Clearly, that's, that's a ridiculous statement. And nor is it actually...testimony came out at the hearing that as a matter of fact the reason that they did not test it, we heard testimony from a witness who said that they had tested the actual steam generator tubing in C rings in the, in the long-term corrosion test to its maximum limit.

It then turned out that the maximum limit at which they had tested it was 1100 pounds. They have, however, qualified that steam generator to, to be able to withstand a main steam line break which is a 3140 pound, that's the pressure under which the steam generator is used.

What I'm saying is that there seems, there appears to be from just the limited amount of information that we were able to acquire at this extremely narrow hearing, that there seem to be very many questions. And I recognize that this is not part of the, the restart hearing process; however, you did include it in your, in your...and, of course, it's a very important safety related issue.

Additionally, I would just like to add that

NRC/119 Tape 4 C.F. one of the things that I noted time and time again throughout these hearings and once again at the steam generator tube hearings was that when asked direct questions about certain things, licensee simply has forgotten or doesn't know. And I wonder if you have noted, as I have noted in reading this record over the past five years that licensee seems to have suffered an incredible case of amnesia.

When they are faced with difficult questions, they simply do not know or they do not remember. And I ask you if we are to believe that, how can we possibly imagine that this, this company that remembers nothing that they have done in the past can possibly learn and correct those errors in the future.

CHAIRMAN PALLADINO: Okay, thank you. I would rather hear from anyone that they don't know rather than give us false information. Not remembering is a different subject.

You mentioned a number of people that you still thave questions about and this matter, I think, will receive considerable Commission attention; however, there were two points that I wanted to ask you about.

One, if I recall correctly, Mr. Ross was exonerated by the Board. Am I in error on that? It seems to me that he was and he seemed to imply otherwise.

MS. DOROSHOW: Well, we certainly still ... we certainly dor.'t know that as far as Unit I leak grades are concerned. I mean that issue now is, is the subject of a licensing board hearing which has been stopped, but I think there are many very questionable things that were raised in the OI investigation that, that challenge Mr. Ross' credibility very seriously. MS. BRADFORD: I think what Miss Doroshaw had pointed out, that he was not expressly exonerated by the, by the, he was not exonerated at the grand jury proceeding. MS. DOROSHOW: The United States Attorney never expressly exonerated Ross as to the Unit 2 leak grade issue. that's where it was.

CHAIRMAN PALLADINO: Yes, I thought maybe

MS. DOROSHOW: That's true...the

CHAIRMAN PALLADINO: They also, the Court also seemed to exonerate Mr. Kuhns and Mr. Decamp and, yet, you seem to imply otherwise.

MS. DOROSHOW: Well, you know, I think that this really sort of shows a...the tunnel vision that the Commission has been using here.

CHAIRMAN PALLADINO: Well, it's not (inaudible) and I'm quoting what ...

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1 MS. DORDSHOW: What he did was he said that 2 they were not directly involved in actual falsification, 3 that they had no knowledge of the actual falsification, but it's clear that the United States Attorney intended 5 the corporation, meaning its senior management, to take 6 responsibility for the Unit 2 leak grade falsification. 7 He said that to the press. He said that to the Court. 8 He indicted the company for a reason. And it was 9 specifically to lay the blame at the corporate level 10 and in that, you cannot, you cannot exonerate senior 11 management because they were not directly involved in actual falsification. They are responsible. They run 12 13 the company. They set the tone for the company and people would not have felt that they could get away 14 with that kind of scheme unless there was some attitude 16 and atmosphere that was pervasive there that allowed 17 that to happen.

CHAIRMAN PALLADINO: Well, I may have to reread the record, but I thought it (inaudible) little
bit different with regard to those two individuals, and
I'm not...

MS. DOROSHOW: Well, I would, I would encourage you to read the United States Attorney, the transcript that...

CHAIRMAN PALLADINO: I've read it but I have

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to reread it to check to see if the flavor I got was different from what you got.

You did make some comments on training, and I, I would like to have the staff comment on your remarks regarding training when they come up. I'm just allerting them because...

MS. DOROSHOW: You are aware, of course, that that is a subject of hearings that we're now involved in.

CHAIRMAN PALLADINO: Yes.

MS. DOROSHOW: And those are ongoing hearings. CHAIRMAN PALLADINO: Okay. Other questions?

You submitted now a motion in a proceeding to revoke the license. I guess I'm wondering whether, why you don't think the, the course that Governor Thornburgh outlined this morning is the appropriate one; that is, to proceed with the reopened hearings on the items where the, the appeal board has identified deficiencies in the record, to put this new information that you've been talking about with others this morning. You've been talking about on the record tested in the hearing process, concludes the, the hearing on the steam generator tube repairs and only after those steps as well as a couple of

others that Governor Thornburgh mentioned this morning at that point considered whether to restart or whether to take other, other action.

To add to my answer my question, basically, why that is the appropriate course as opposed to proceeding right away with, with something towards revocation.

MS. DOROSHOW: The Appeal Board has made very clear in its decision that it was limited in the scope of evidence that it was allowed to consider and that as far as the allegations which have come to light which are not part of the record, since the record closed that it had basically no jurisdiction to even include discussion of those incidents.

Recently, we submitted a motion to the Appeal Board, that's just one example, a motion to reopen the record on a couple of issues; one being training irregularities which weren't faced before the accident. And that was based on the recent OI report that had come out which had some very, very serious damaging findings as to the types of training violations which were, which were going on before the accident.

The Appeal Board denied the motion to reopen on that and they said, basically, that as to pre-accident events that if there were violations of

regulations, that would be an enforcement matter but the issue is outside the scope of those, the proceedings that were before them.

What's interesting is that the staff has now determined that violations did occur and in its most recent NUREG which reports on the staff's new position on integrity, it uses those violations and looks at them in light of the response to the violations, the accident and the subsequent cheating incidents to determine that there is a pattern of conduct involved which, which indicates that there were serious character problems, that you can really only look at character in terms of patterns. And you just can't look at them as incidents as discrete items, as the Appeal Board feels it is forced to do.

And what, what seems to be the Commission's position at this point is that you look at items here and there and if this one doesn't involve a Unit I operator and that one doesn't involve a Unit I operator, well, we're okay without looking at the character issue as a whole.

The character is something that must be looked at in terms of patterns and its cumulative effects. And it's become very clear to us recently that neither the licensing board, the appeal board process,

nor the process the Commission is engaged in right now is taking into account all of the character evidence that is important. And the staff, itself, has not. If you look at the NUREG that just came out, there are a number of issues which were expressly not dealt with in that NUREG, some of which were the subject of licensing board hearings and are the subject of ongoing appeal board hearings. Other ones are, concern issues that OI was expressly directed not to investigate, such as the company's response to the Unit 2 leak rates incident; why they withheld the Fahgren 10) and Benson report, what they did to, to, to respond individually to people who may have been involved. You know, basically doing nothing until last year, having knowledge that that was going on.

And that's why it seems that what's happening in this particular process is that the character issue is not being examined and that the Commission has a statutory obligation to examine that issue as a whole. And if they're not going to do it in this proceeding, then they've got to do it somewhere.

CHAIRMAN PALLADINO: Well, you imply that we're not going to do it and you imply that the staff hasn't done it. The staff very expressly, I think in

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its brief, says that they not only looked at the individual cases but then collectively... I don't know exactly what their words were. But I do recognize that is an important point and I think it's important

MS. DOROSHOW: I think it's wrong to think that the staff did. I think if you look at the, just the table in the beginning where they, they discuss issues that they considered resolved and, therefore, were not made parts to the NUREG. I mean I can recite a list of issues for you that were expressly not part of that but, also, if you look throughout the report, there are within certain incidents, they expressly will state, we do not make a finding on this particular issue because OI did not investigate it.

They're all relevant character issues. And it's also, as far as the Commission is concerned, I think that the January 1st, January 27th memorandum and indicating that there were no outstanding integrity issues that they, that the Commission felt other than Unit I leak rates: which would impact on a restart decision is pretty good indication to us that these issues are not planning to be dealt with by the Commission. And that, that's just wrong.

NRC/119 Tape 4 C.R. don't have any major difficulty in reaching a restart decision and are looking at extra records, material, material that wasn't part of any of the hearings.

What I seem to hear you saying is we should read that material in a different way, for example, than GPU has argued that we should, should read it, and that it should lead us to the, to the opposite conclusion.

But you seem to be saying there's no particular problem in looking at all of that material together and making a decision now. Am I reading you wrong?

MS. DOROSHOW: Yes. I don't think the Commission should be looking in that material outside the context of a adjudicatory hearing. And...

COMMISSIONER ASSELSTINE: But you're asking us to do just that, aren't you?

MS. DOROSHOW: The 2206 ask that hearings be instituted to proceed with the revocation. We understand that that can't be done until there are hearings held.

COMMISSIONER BERNTHAL: Well, at the risk of prolonging for just a minute, could you...you've made a number of comments here. And I would like to see if we can get a summary of it here to the extent that, if

possible, you might outline the steps that in your judgment...Governor Thornburgh, of course, laid out his judgment on this matter...can you, can you tell us of these issues that you raised then sucinctly now to summarize what steps the Commission needs to take in your judgment before considering a restart decision?

MS. DOROSHOW: Well, I mean I think we've been pretty clear on the fact that none of these issues have been properly litigated, the ones that have certainly come up in the past two years, but all of them need to be litigated in the context of a adjudicatory proceeding and that means, first of all, the ones that we're involved with right now, meaning the training issue and the Decamp (inaudible) issue as well as the Unit 2 and the Unit 1 leak rate issue which we, we apparently have a motion before the Commission to lift their stay on those, on at least the Unit 2 leak rate issue.

With that aside, we have come to the, to the conclusion, having viewed all of the OI reports, having viewed all of the evidence which has come to light in the past couple of years, that the company does not meet its statutory requirements for character. And if all the issues currently before the licensing board go

NRC/11) Tape 4 C.R. to that character issue, but, in addition, there should be character hearings instituted, basically, an entirely new process begun to determine whether license needs to be revoked because it appears that that is not under discussion by, by the Board. It's just a matter of whether the, the original concerns which were layed down by the Commission in the August 9th order have been resolved.

COMMISSIONER BERNTHAL: So, you're, if I can summarize, you're essentially saying that in your judgment this company shouldn't operate that plant ever? Is that what you're saying?

(Applause.)

MS. DOROSHOW: Exactly.

MS. BRADFORD: I think if you look at all of these issues as a whole rather than as a Commission, as the Boards have been looking at them, each as a separate entity. It just seems to us, it's just really obvious to us that you have never looked at all of these issues and how they impact on the integrity of this, of this company. You've looked at just little tiny pieces of the problem.

COMMISSIONER BERNTHAL: Have you looked at all of the record and the fact that this company in the meantime over the last five years has been operating a nuclear power plant, the Oyster Creek plant? Do you

derive any conclusions from such a look if, indeed, you've looked at that?

MS. DOROSHOW: Well, if you look at the petition that we filed, the petition relates to all the nuclear reactors that are under GPU Nuclear's control right now. That includes Oyster Creek because we believe that the, the poor record which we have seen revealed by the evidence in the restart proceeding indicates that the same character problems would impact on safe operation of Oyster Creek.

Now, the fact that Oyster Creek has not had a major accident in five years, I don't think is indicative of anything. I think it does not mean that the company does not have the requisite character to operate a plant. I don't believe the Oyster, from what I know, the Oyster Creek record has not been very good, that some have ranked it among the worst in the country, is at least what I understand. And I think that, that the Commission has an obligation to determine if certain incidents come up then that raise questions as to the character of the company, that action is taken on that evidence before some kind of major accident happens.

COMMISSIONER BERNTHAL: Okay. I think we may want the staff to speak to the record of the Oyster Creek operation, if we're trying to make broad judgments

NRC/119 Tape 4 C.R. here on character.

My understanding is that it was not the best plant in the country but that that has improved over the recent years, the last year or two, and maybe staff ought to speak to that. That's all I have to say.

MS. BRADFORD: Commissioner, I think, I think we've seen evidence of that most recently in the Beta (ph) and the RHR report and, in fact, GPU in commenting on those reports when they were finally issued made it very clear to differentiate between the TMI-I report and the Oyster Creek portion and pointed out that the Oyster Creek was a somewhat even worse record than they had at TMI.

CHAIRMAN PALLADINO: Well, I should observe, though, that it's not the same group of people that operate TMI-I operate Oyster Creek. And, so,...

MS. BRADFORD: But ...

CHAIRMAN PALLADINO: Wait a minute.

MS. BRADFORD: Okay.

CHAIRMAN PALLADINO: So, that the extent to which you should ask the staff to explore it should be limited to that portion that...

COMMISSIONER BERNTHAL: Yeah, well, my point was that I think one of the...

NRC/119 Tape 4 C.R. GHAIRMAN PALLADINO: Let me finish my paragraph. I think we should limit any comments by the staff to those aspects of the Oyster Creek operation that's common to TMI-I.

COMMISSIONER BERNTHAL: Certainly. One of the main points has been simply that calling in to question the competence, character, integrity, whatever words you wish to use of the very senior management and they, of course, are also responsible for Oyster Creek.

MS. DOROSHOW: Just to make one short point on that. You know Ed Wallace was the individual that worked with Bob Arnold on preparing the company's response to the notice of violation after the accident which both OI and the staff now determine contained false statements and that Arnold and Wallace were primarily responsible for constructing that response. Do you know where Ed Wallace is right now? He's at Oyster Creek.

CHAIRMAN PALLADINO: Well, let me turn to

Lando Zech. I do want to make one comment on a

point you made.

COMMISSIONER ZECH: Well, I just have only one comment to make and that is to assure you that the integrity and the competence and performance as well as the issues of quality, people and integrity,

NRC/119 Tape 4 C.R. all very important, character, very important. And I think that although, I suppose one could say they're judgmental, they're very important issues to consider and, certainly, I will consider them and I know my fellow Commissioners will also. Thank you very much.

CHAIRMAN PALLADINO: Thank you. You spoke to the point I wanted to take exception on. You indicated that nobody is looking at the overall, and the Commission apparently is...you said it was obvious that we're not looking at the overall.

I'd just like to dispell you of that thought because I think as Mr. Zech said, this is a matter very much of interest and concern to the Commission.

MS. BRADFORD: Well, may I say that in response to that that I came by that observation by, after having been involved in the cheating hearings. And when the licensing board looked at, at the integrity issue and they, they found reason to rebuke licensee for what I would call definite, very definite issues of questionable integrity; however, they choose to see that as being discrete. That problem with integrity as being discrete to the training program. And that is a series of events such as this which ledtus to believe. And, certainly, if you're saying that, that the whole problem will be reviewed, when we see some evidence of

that, we will be much relieved; however, the evidence that we have seen is that things are being looked at in, in a piece meal fashion.

CHAIRMAN PALLADINO: Well, thank you very much. We appreciate your coming and giving us your views.

I wonder if next we might have the representative of the Union Concerned Scientists, Miss Ellen Weiss, to join us at the table.

MS. WEISS: Good afternoon, gentlemen. Thank you very much for the opportunity to speak. My name is Ellen Weiss with the law firm of Harman and Weiss in Washington. I represent the Union of Concerned Scientists. I hope you'll bear with me. My notes have expanded during the past three hours and, and it grew less legibile.

I'd like to begin by discussing something that hasn't been mentioned this morning and that is the Appeal Board decision in ALAB 772, and why allowing TMI-I to operate in the face of that decision would be wrong.

The heart of that decision is the finding that the record does not support the ultimate conclusion that GPU has the competence required of a nuclear licensee nor does the record support a finding that the

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operators have been trained and prepared in the manner necessary to insure safe operation.

As the Appeal Board said, the licensee board correctly framed the issue. Is the instruction adequate to prepare the operators to operate the plant safely? We disagree with the Board, however, on its affirmative answer to that question. So much, by the way, for GPU's peculiar claim that the Appeal Board and the Licensing Board did not reach inconsistent conclusions.

Now, the issues at stake include those most fundamental to operate a competence. As the Appeal Board said, does the training program actually enhance the operator's knowledge or does it simply encourage memorization? Are the licensee and NRC's exams an effective way to measure an operator's ability to run a plant?

One-fourth of those who took the April 1981

NRC exams were either directly involved in cheating in
both company and NRC exams contrary to Mr. Clark's

assertion it was only NRC exams involved, or were
implicated in some manner that could not be satisfactorily
explained.

Several of these were and still are in supervisory positions. Beyond the actual cheaters, the

NRC/119 Tape 4 C.R. record is overwhelming, that the operators and the training staff did not take the training or examination process seriously, that they treated it as a technical obstacle at NRC directed for them and beyond that, that the content of the training program, its substance, was gravely deficient.

The training and testing program relied upon wrote memorization and did not attempt to teach operators material even in the areas where they had demonstrated weakness.

The same questions were repeated week after week until the operators finally learned to parrot the approved words. According to the Licensing Board, from this pattern one must conclude that the training department did not take seriously, Special Master and the Licensing Board, did not take seriously the licensee's obligation to teach the subjects required by the Commission's order and that the operators did not take seriously their obligation to learn it.

The Commission appears to have decided although

I hope after this morning that the question is open
to reconsideration. The questions of GPU integrity can
be separated from restart, but the principle cannot
extend the competence.

For one thing, questions about the competence

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of this utility were specifically included in a short list of unique circumstances at TMI, that the Commission stand to require treating TMI a different matter than all other B&W plants. In other words, requiring shutdown pending hearings. And that short list was required "To be resolved prior to restart".

In addition, the Commission included among the short-term actions that the company is required to complete as a condition of operation, the retraining and reexamination of all operators.

Thus, this Commission ruled five years ago
that the prerequisites for restart must include
successful retraining of all operators in a demonstration of management competence.

The program undertaken by GPU to fulfill this post accident requiremnt is the precise program the evidence has shown to be aggrieniausly inadequate.

There is no record evidence showing that it is, it has improved. The mere passage of time does not transform bad into good nor is GPU due any presumption that its reconstituted experts are now credible when the previous testimony of the same people fell so far short of describing reality that even the Licensing Board spoke in frustration of the paper curtain.

Finally, as the Appeal Board noted, competence

is beyond question directly related to safety both generally and in this particular case. Proper training is essential to safe operation.

In this case, in particular, numerous design related issues raised by UCS and others were resolved by the Licensing Board on the grounds that design changes or improved equipment would not be necessary precisely because the greatly improved level of competence of GPU assurred by the augmented post accident training program would obviate the need for these hardware improvements. And we documented that time after time and place after place.

In summary, ALAB 772 establishes that there's no basis in the record for the necessary confidence that GPU management or operators have the requisite competence to operate this plant safely.

There are only two ways in which one can gain the necessary confidence. One is the company's training and testing program. The other is the NRC examination process. Both must be independent and leave reliable checks on competence. And the evidence in this case shows beyond question that neither has been.

Let me pass, now, to integrity and see if I can touch just briefly on some of the major points. The

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point which I want to make to leave you with is not only that there are, that there were many acts of misconduct, of shading, of expediency which took place, but that the attitude which permitted that to happen remains evident.

First, there was systematic falsification of leak rates Unit 2 over a period of many months up to and including the day of the accident and this is proven. Less widely known is that in October of 1978, five months before the accident, and by the way while the plant was still operated by GPU Service Corporation which is not covered by GPU's embargo, it was discovered by an NRC inspector that the company was routinely discarding bad leak rates rather than following the procedure of moving toward shutdown.

He called this a shocking a fundamental misinterpretation of NRC rules and he did this in meetings with the supervisor of operation, two shift superintendents, the supervisor of technical operations and various thift foreman.

We were specifically promised that the practice would stop and that all operators would be given training on the correct interpretation of the license.

It did not stop and it got worse. The company

deliberately continued to violate its license on a virtually daily basis after being informed at high levels that its conduct was shocking.

To this day, GPU and that is the new GPU has held no one, not a single person, accountable for the misconduct to the Unit 2 leak rate falsification. They have completed no investigation to identify who was responsible, who allowed it to happen, who turned their eyes away and who condoned it.

Indeed, GPU withheld its only internal report, Fahgren (sp)Benson where, by the way, only Mr. Hartman was interviewed, for three years until 1983, well into the new GPU regime. These are not the actions of the company which has accepted responsibility and changed course.

The staff says the falsification was the result of negligence on the part of management. I submit to you that that is a convenient fabrication. Let us assume that Kuhns and Decamp did not know that it was happening. Who did? Somebody did. Do you really believe that the only guilty parties were the operators who manipulated the controls? Where was the motive for them?

Particularly, when we now know that the company falsely promised in October 1978 to stop. If

one seriously expected to believe that the incident with the inspector which required, by the way, an LER to be filed with the NRC, was never communicated above the level of operation staff, I submit that's not believable.

Let me move to the Unit 1 leak rate falsification question. And assume, simply for the initial purpose of this discussion, that there was not a systematic falsification at Unit I. It is proven, however, even in the version of the facts most favorable to GPU that just as at TMI-2 bad leak rates were routinely thrown out and negative leak rates within one gallon per minute were accepted a valid although the operators well knew that they could not reflect actual plant conditions because it's impossible to get a negative leak rate.

This is the same, precisely the same shocking misinterpretation of the rules discovered at Unit 2, and it went on at both plants, just makes it even more difficult to believe that only the operators were involved.

As to whether intentional falsification was involved at Unit 1, it is certainly true that far fewer instances of leak rate manipulation by the addition of hydrogen and water during the test was found at

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Unit 1 than at Unit 2 because it was not so hard to get a good leak rate for Unit 1. OI says that it can, therefore, not find a motive for falsification nor can it find a benign explanation for the addition of hydrogen in small spurts.

Perhaps, falsification was necessary only occasionally at Unit I, but the rich man who embezzles only occasionally to cover a temporary shortage is no less guilty. Moreover, by throwing away the bad tests and accepting the negative ones as valid, that Unit I operation staff which was led then and now by Michael Ross showed an unacceptable attitude toward basic safety surveillance requirements. And no one, no one has been held accountable.

The Unit I events are particularly important because, of course, the limited embargo does not apply to TMI-I personnel.

Let me discuss my final incident, the cheating.

One of the main TMI lessons learned was the need for greatly enhanced operator training and for requalification. The special Master Licensing Board and the Appeal Board all agreed on the widespread cheating on company and NRC exams. Surprisingly, this occurred most at supervisory levels and instructor levels up to and including the supervisor of operations

at Unit 2.

What I would like you to focus on beyond the cheating is GPU's response. The company, the new post accident company denied the guilt of all but two operators who confessed. They hired a lawyer purportedly to investigate and present his independent investigation. He testified under oath as GPU's witness in the hearing, and he conducted not an independent investigation but he prepared an advocacy document. All the boards are virtually in agreement on this.

He uncritically accepted denials of operators later found by all the boards to have obviously cheated.

Most telling is that he and, therefore, one must only presume GPU viewed its interests as being advanced by denying and minimizing the problem.

More than that, it rewarded in competence and dishonesty. Mr. Housted (ph), a licensed training instructor who was found by all boards to have refused cooperation with the NRC investigators, gave an incredible testimony under oath and to have such distain for the training program that his attitude was a partial explanation for its failure. GPU's reaction, he was promoted to supervisor of non-licensed operator training.

Mr. Long was director of training and educa-

NRC/119 Tape 4 C.R. tion of GPU and during the cheating. Licensing Board said after hearing him testify that it could not determine that he understood that his training department was at fault and that its failure was the principal cause in the breakdown in integrity of the training and testing program. GPU's reaction, Long was promoted to vice president in Nuclear Assurance succeeding Mr. Herbine (ph).

These instructive to contrast the treatment of these people and such management, upper management as Arnold and Herbine gently nudged into non-nuclear activities while GPU continues to profess itself convinced of their unimpeachable integrity with the treatment of Richard Parks, the cleanup engineer who went public with improper practices during the cleanup. No place could be found in GPU's entire organization for a concededly competent engineer whose concerns were found justified and whose sin was that he wouldn't keep quiet.

The actions of the new GPU are not those of a company that takes responsibility for its actions, much less do they exhibit such characteristics of integrity as firmness, self-discipline, ethics, sincerity, avoidance of expedience.

Time does not allow the discussion of any more

specific events, although there are many. Your staff in its most recent filing states that if it had known earlier what it knows today, it would likely have had to conclude that the company doesn't have the integrity required under the Atomic Energy Act.

My answer to that is sadly that your staff did know. It certainly knew enough, but it closed its eyes. Your staff knew of the Unit 2 leak rate falsification from May of 1979. The public and the Licensing Boards didn't know because they weren't told by the staff, but the staff knew. And, yet, it affirmed GPU's integrity.

Your staff also knew of the cheating and it affirmed GPU's integrity, and your staff knew of the material false statements. I well remember another oral argument in Harrisburg two and a half years ago when one of the Commissioners asked the staff lawyer whether it was cheating for the Unit 2 supervisor of operations to have handed in a makeur exam necessary for his annual requalification written partially in another's hand, the action, by the way, for which Mr. Floyd has recently been indicted in Federal Court. And the attorney said that it was a philosophical question that he could not answer. The sad fact is that the staff disregarded and rationalized the evidence against GPU and was then put

in a position where it has had for the past three years to defend its own misjudgments, a position in which it is still mired.

The staff now says that there has been a dramaticchange in GPU as of January 1, '82. It's a new company. This premise is also or a variation of it central to GPU's position. I ask where is the objective evidence that this new company has dramatically changed course? Where is the objective evidence of a true house cleaning because there is a difference between wishful thinking and evidence?

Let us talk, for example, about environmental qualification. A safety issue which cuts the broadest possible swath across all safety systems. Like all other plants, GPU has been under order since 1980 to have all safety equipment environmentally qualified and by June 30, '82, for each component to be either qualified and documented as such or a justification for continued operation.

The staff did a limited audit just this spring of eight equipment files, eight equipment files in the emergency feedwater system and found that in no case, zero for eight, was there documentation to demonstrate environmental qualification. And in each case the component had been asserted to be fully

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qualified. And the staff found no evidence of management or a QA involvement in this issue. The fact is that the same attitudes persist. No one has been held accountable for incident after incident.

The new GPU responded the cheating episodes by denial, minimization and promoting responsible persons. GPU responded to the accident itself by sanitizing its only, its only internal report to down play the management's role and remove references to license violations.

CHAIRMAN PALLADINO: Miss Weiss, I got a signal that time is up, but I would like you to give me a feeling for how long...

MS. WEISS: I'm almost finished. I'm on the last two pages.

I just want to make one remark and then go to my conclusion. Commissioner Asselstine asked a question and got what I thought was an extremely telling response. If I can find my notes. Yeah.

Commissioner Asselstine asked if it was fair to judge GPU by its response to the cheating incidents as well as the cheating incidents which occurred in 1981. And Mr. Kuhns said, no, it wasn't really fair because the, the real new organization wasn't in place in 1981.

NRC/119 Tape 4 C.R. Two breaths later Commissioner Asselstine asked another question. He said is it fair to make this decision on the basis of off the record materials, the decision on integrity and competence. And Mr. Clark answered that question by saying but you do have, you do have on the record decisions. You have Licensing Board decisions from 1981.

Put aside for the moment that, that ignores the Appeal Board decision. You can't say on the one hand don't judge us by the bad things that we did in 1981, judge us by the good things that we did in 1981.

GPU's plan for restart requires the NRC to accept three unacceptable premises. The first is that while the TMI-2 staff, TMI-2 staff was deeply compromised, the TMI-I staff was in the same corporation, was and is pristine. The proposition is not believable but it is essential to both the GPU and staff proposals.

The second premise is that while Messrs. Kuhns and Decamp were sufficiently removed from daily TMI activities, to be unaware of the leak rate falsification in that training, the cheating, the laundering of the cheating report, the inaccurate response to the notice of violation, the NRC can depend upon the effectiveness of their current promises to insure strict adherence

NRC/119 Tape 4 C.R. to high standards of integrity throughout the organization.

I say top management can't have it both ways. If they're
not responsible for failure, they're not in a position
to insure success. It's not enough to keep saying they
didn't personally know. They bear responsibility.

The third premise is that a small group of GPU personnel hired after the accident cancure the problem. I heard Harold Denton in an open Commission meeting assert that he gets his faith in the new GPU from Messrs. Clark and Hukel (ph).

continues the pattern of the old. Perhaps, the clearest example is its failure to this date to hold anyone accountable for leak rate falsification, Messrs. Clark and Hukel notwithstanding. Clark was in place during the cheating and the cheating hearings. He was in place during the time when GPU denied the obvious cheating in sworn testimony in that hearing. He was replaced when Richard Parks was fired for raising safety concerns about the cleanup. He was replaced during the period when the Fahgren (sp) and Benson report was withheld, the BETA NRHR reports were withheld and during the preparation of the Keaten report. And it seems to me that you can't march up here and say we have humbly determined to follow all of the lessons learned from the

NRC/119 Tape 4 C.R. accident when the facts of your recent past testifies so much in the other direction.

It is wishful thinking to imagine that two people can change the course of this ship and they have not. Messrs. Clark and Hukel report to the same Board of Directors as, by the way, does the new independent safety oversight group, and they direct an organization. whose fundamental instincts are unchanged.

I conclude by recalling the dictionary definitions of integrity and character: Moral excellence, firmness, resolution, self-discipline, high ethics, forcing judgment, other sincerity, honesty and candor, avoidance of deception, expedience or artificiality or shallowness of any kind. These qualities are, unfortunately, not characteristic of GPU. It should not be permitted to operate TMI-I.

The concerns which prompted the TMI-I shutdown have not been resolved. Indeed, there's more reason
now to doubt the competence and integrity of this
company than the Commission could remotely have
imagined in 1979.

Thank you.

(Applause.)
CHAIRMAN PALLADINO: Thank you. Miss Weiss,
you indicated that you had, you said restart
would require acceptance of three unacceptable premises.

Aren't they really the questions that we're addressing?

In other words, I don't think we're making a premise

where a TMI-2 staff was deeply compromised and TMI-I

staff pristine. It's part of the question that we're

searching the answer to.

MS. WEISS: What I mean to say there is that in order for you to accept the GPU proposal for restart, you must accept these three premises which we believe are unacceptable.

CHAIRMAN PALLADINO: It's not clear that that is so, but it may require a finding that way. I'm not sure. And I think the same point with regard to your second premise, that it's a question that we're exploring.

Now, you speak about a small group of GPU personnel hired after the accident as curing the problem. I heard, I believe correctly, Mr. Clark indicate that about three-quarters of a present organization either did work for GPU or did work for...

MS. WEISS: Met Ed.

CHAIRMAN PALLADINO: ...that, that plant.

MS. WEISS: Met Ed, yeah. Well, there's certainly been a lot more than a few people hired, but my observations from sitting here meeting after meeting and reading paper after paper and it's been said quite

explicitedly by your staff, when asked where do you get the confidence that the new management has changed course dramatically and can do the job, they mention Mr. Clark and they mention Mr. Hukel. I don't think there's been any examination of these other 350 people, except that we know they are new.

CHAIRMAN PALLADINO: But they do mention quite a few people in their report, but, and some of the other comments they make are similar to some of those that you make on some of them.

Let me just ask one other question. You made a statement that said and I can't quote you correctly but I get the spirit of the question, you said the evidence, beyond question, shows that neither the NRC nor the licensee looked into the training adequately. I don't remember what the end part was.

But, from my reading so far, I thought that
there had been a great deal of attention given to training and that there had been improvement in it. Now, if
you think, if you have evidence that beyond question
shows that neither the NRC or the licensee addressed
the question of training properly, I'd be interested in.

MS. WEISS: Well, I think all you have to do is look at the Appeal Board decision. That is the latest decision on the basis of the record evidence in this case. Everything else since then is self-serving

assertions, understandably self-serving on all sides, none of which have been subject to a test of taking the stand under oath and being questioned.

The Appeal Board decision in ALAB 772 says on the basis of this record. We cannot make a finding that the training was effective.

COMMISSIONER BERNTHAL: That was a very important point, in fact, in one of the key issues here, Joe, it seems to me, is, in fact, a procedural issue. I find it incredible that we have been speaking...I shouldn't say we, the Appeals Board has been speaking to a record that is two and a half years old.

Somehow if not a year or two ago, at least today we need to make a decision not just in this case but, perhaps, I hope not future such cases but in general how to deal with that kind of situation. It's pointless to be talking about a record that clearly must be out of date.

CHAIRMAN PALLADINO: But as I recall, and I might be wrong, their principal specific was that the program hadn't been reviewed by the operators accelerated retraining program.

MS. WEISS: With all due respect, Mr. Chairman,

CHAIRMAN PALLADINO: The (inaudible).

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MS. WEISS: Sure.

COMMISSIONER BERNTHAL: There's no question there's a lot of new information, and there's no question that it has been dealt with in adequate or less than adequate fashion, depending on your point of view, but in this process that we've set up here, we apparently demand an adjudicatory procedure in such matters.

And all that I'm saying is in expressing is my sense of frustration that the record is two and a half years old that we're talking about.

CHAIRMAN PALLADINO: Well, before you draw a conclusion, I don't want to be vague but...

COMMISSIONER BERNTHAL: I haven't drawn a conclusion.

CHAIRMAN PALLADINO: About what our procedure is, it would be well to reread some of the orders that the Commission has put out, but I will debate that later.

COMMISSIONER BERNTHAL: I'm not necessarily placing blame. I'm just pointing out the flaw in the system, Mr. Chairman.

MS. WEISS: If I could just for the Chairman's benefit, for my benefit.

CHAIRMAN PALLADINO: For all our benefit.

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MS. WEISS: Yeah. Quote to you, again, what, how the Appeal Board characterized its own decision.

(END OF TAPE 4).

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this case is the instruction adequate to instruct the operators to operate their plant safely. We, meaning the appeal board disagree with the licensing board on its affirmative answer to that question. That is not,

many times this is directly related to safety both

MS. WEISS: What it said was that the issue in

generally and in this case. It is not just a matter of the opinions of the use experts. I assure that there

will be other experts appearing there.

CHAIRMAN PALLADINO: I would want to reread it. I don't know if that is the whole paragraph. One of the things that I did learn from the only law course I ever took was you should never read one sentence out of a paragraph. You should at least read the paragraph. But, it was impression that they concentrated on particularly one point. However, I admit that training is a very important item and one that we will have to give careful attention to in our deliberation. Let me turn to my fellow commissioners.

COMMISSIONER ASSELSTINE: I just have one question, Ellen. With the addition, if you added in environmental qualification, do you think that the set of steps that Governor Thornburg outlined this morning are a set of necessary and sufficient steps to get us

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to the point where the commission could then make a restart decision one way or the other. 2 MS. WEISS: That's environmental 3 qualification, emergency feedwater, emergency planning. 4 COMMISSIONER ASSELSTINE: Also I was thinking about the treatment of the 2.206? MS. WEISS: Right. The 2.206, that's what I meant. Emergency planning integrity complex ... COMMISSIONER ASSELSTINE: Steam generators tube repairs and then the three open items that are 10 addressed in the ALAB. 11 MS. WEISS: I think so. 12 CHAIRMAN PALLADINO: Fred, do you have more 13 questions? 14 COMMISSIONER BERNTHAL: I think not. 15 CHAIRMAN PALLADINO: Lando? 16 COMMISSIONER ZECH: I just want to thank you 17 very much. I think you brought out some very important 18 issues and certainly they are ones that we on the 19 commission should consider very carefully. I appreciate 20 your summarizing them here just now for Commissioner 21 Asselstine. Thank you. 22 MS. WEISS: Thank you. 23 CHAIRMAN PALLADINO: I'm going to suggest we 24 take a short break, 10 minutes and then we will get to 25

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the staff. Thank you.

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(Brief recess.)

CHAIRMAN PALLADINO: The next presentation will be made by the NRC staff.

MR. DENTON: Thank you Mr. Chairman. With me at the table is Tom Murley, the administrative in region 1, Jack Goldberg, the attorney, OELD attorney on this case, and Bill Russell, deputy director of human factors who directed the evaluation of the licensees management integrity, resulting in report NUREG 0680. Let me turn the meeting over to Mr. Goldberg to begin the staff's presentation.

MR. GOLDBERG: Chairman Palladino and commissioners, I had just a very few brief remarks on the staff's overall position on restart. In particular, on the management concerns with the basis of the commission's extension of the TMIl operating license. Then, I believe Mr. Denton, Mr. Russell, and Mr. Murley would like to address some matters that were raised today. We, of course, would be happy to attempt to answer any questions that the commissioners may have.

The staff's overall legal position is precisely the one which was stated by the commission in CLI8134. That is, that when the commission believes that the concerns which were the basis for the

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BH NRC-119 T-5 immediately effective suspension of the TMIl operating license have been resolved, then, the public health, safety and interest no longer mandates that suspension, and the suspension should be lifted.

We emphasize that it was the commission's concerns which prompted the immediate effective suspension and it must be the commission's decision as to whether those concerns are sufficiently resolved to allow restart. The staff believes that there is adequate information available to the commission on which it can base a decision.

If the commision believes that its concerns have been sufficiently resolved to authorize restart, then it should make a decision to authorize restart. If, however the commision does not believe that its concerns are sufficiently resolved based on the information that it has available to it then it is not obligated to make a restart decision now.

And, certainly the commission can proceed with further hearings if it believes that those hearings are necessary to resolve the concerns that were the basis for the suspension. The staff has evaluated the OI reports which were recently completed in connection with all the integrity issues that were raised concerning TMII, subsequent to the close of the

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BH NRC-119 T-5 evidentiary record. We have documented that analysis in supplement 5 which has been provided to the parties recently as well as provided to the commission and the boards.

Mr. Russell is here to answer particular question that the commission may have on the staff's analysis as documented in that supplement. We would note that that document has not been the subject of party comments.

With respect to ALAB 772, the appeal board identified some concerns that it had with the evidentiary record. The staff does not believe that ALAB 772 is necessarily a bar to restart. There is available to the commission, information on each one of the areas of concern to the appeal board which the commission can rely on if it chooses to make a restart decision.

With respect to the training and testing program, there have been a number of fairly recent evaluations of the licensee's current training and testing program, including SALP reports, inpo evaluations, NRC inspections, and a report by the reconstituted OIRP committee. These evaluations and reports can provide a basis for a commission decision that its concerns in the training area have been

sufficiently resolved to permit restart.

with respect to the Decamp mailgram issue, another area of concern to the appeal board, there is the sworn statement of Mr. Decamp taken by the NRC in September of 1980, as well as the staff's testimony in this proceeding which can provide a basis for the commission decision on whether the concerns that it might have as a result of the Decamp mailgram have been sfficiently resolved for restart decision.

Similarly, with respect to leak rate testing at TMII, the third area of concern to the appeal board. There is no completed an OI investigation which deals with that subject matter. In the staff's view, it does not identify any significant adverse implications for any key TMII management or operating personnel, so as to be a bar to restart.

In conclusion, we would like to emphasize that the commission has to decide whether the concerns which formed the basis for the suspension have been resolved. There is adequate information available to the commission if it wishes to make a restart decision now.

If the commission believes that the concerns aren't sufficiently resolved based on the available information, then it is certainly in the commissioner's

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BH NRC-119 T-5 discretion to pursue further party input and further hearings if necessary to provide the commission with the information that would be adequate to resolve those concerns.

I believe that Mr. Denton would like to address some of the points that were raised this morning by some of the other parties as well as some points and questions that were asked by the Commissioners.

MR. DENTON: There are four issues which we had planned to briefly discuss. That's management issues, emergency planning, certification issues, and the steam generator issues. Let me go through those first. The staff suspended its judgement regarding national integrity in April of last year because of the information that was beginning to unfold particularly as a result of the information that came available during the B&W GPU law suit and other sources. What we have done since that time is await the outcome of all of the OI investigations and this report, NUREG does summarize the staff's views with regard to maagement integrity both individually and collectively. I don't propose to read it, but it has not been subjected to adjudicatory process and it has not been commented by the other parties. We certainly recommend that you consider getting comments from other parties if you so desire.

CHAIRMAN PALLADINO: This is on 0680?

MR. DENTON: Yes. In the staff's view this issue is resolved. Perhaps I should read the bottom line from page 1318. It says based on all of the information reviewed by the staff in balancing the past improper activities of the licensee against its subsequent record of remedial action and performance as well as the record of current senior management of the licensee, the staff concludes there is reasonable assurance the GPUN can and will conduct its license activities in the course of regulatory requirement and the GPUN can and will operate TMIL without undue risk to health and safety to the public. That's based on our review of the information contained in the 9 investigation reports and a number of other sources.

We think we tried to document the basis for our view, and dealt with all the issues that the commission has identified we should deal with in that.

The next area I wanted to cover was emergency planning. That's an issue which was a subject of the original commission order that board also laid down some requirements in that area. We sent the commission a letter a few weeks ago saying we could no longer

BH NRC-119 T-5 met. We have in the audience today a representative from FEMA. It is my understanding that the test required to demonstrate correction of those Class A deficiencies in Dolphin and Lancaster County will not be done until about mid October and will be sometime after that assuming they are satisfactory that we would receive from FEMA certification that those Class A deficiencies had been corrected. If you would like to go into that, we have a Staff or FEMA who can discuss that.

CHAIRMAN PALLADINO: How long after the exercises, we might get something from Vema, do you know?

MR. DENTON: Let me ask Mr. Jordan from I&E or Mr. Wilkinson who is here from FEMA who might like to answer that.

MR. JORDAN: I'm sorry, Mr. Chairman, I couldn't hear your question, could you say it again?

CHAIRMAN PALLADINO: How long after the exercise might we get some indication from FEMA on their conclusions?

MR. JORDAN: Okay, I will let Bob Wilkinson of FEMA answer that question.

MR. WILKINSON: Mr. Chairman, normally it is a

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period of 30-45 days. There could be some expedited action in this case. We will pay particular attention because of the nature of these category A deficiencies.

CHAIRMAN PALLADINO: Did you say 35-40 days.

MR. WILKINSON: 30-45 days.

CHAIRMAN PALLADINO: On the expedited basis, or is that your normal?

MR. WILKINSON: I would expect on an expedited basis about 30 days would be what we expected.

COMMISSIONER ASSELSTINE: So, that would be 30 days after the exercises are concluded about the middle of October.

MR. WILKINSON: Yes sir. I would hasten to add that there is a relatively firm date for the exercise for Lancaster County, because that is a part of the Peach Bottom exercise, whereas in Dauphin county we are awaiting the scheduling, the final scheduling of that exercise until the completion of their new emergency operating center. So, that is a floating date for the Dauphin county exercise.

COMMISSIONER ASSELSTINE: I have just one other question I could ask the FEMA representative. Is the Dauphin county exercise a tabletop exercise, or is it more of an actual testing of the people themselves.

MR. WILKINSON: The Dauphin county exercise

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BH NRC-119 T-5 goes beyond the, simply the tabletop exercise in that it has involved the activation of the emergency operating center and some simulated situations to involve a decision process for making protective action recommendations. It will also involve certain items which are closely related to your certification item 144 in that it would require activication of the alert warning system and the communication system between Dauphin County, the state of Pennsylvania, the Utility, and other local jurisdictions with that particular EPZ.

CHAIRMAN PALLADINO: Could I ask what is the staff's position with regard to the need to wait for the emergency exercise before lifting the immediate effectiveness order?

MR. DENTON: It's our understanding that the order requires that we certify that effective emergency planning is in place. That goes back to the original commission order. It is my view that we cannot certify that is, until we have an affirmative letter from FEMA.

CHAIRMAN PALLADINO: But, wasn't the emergency planning litigated once?

MR. DENTON: Yes, and it was found at that time, maybe I should let Jack speak, but to be adequate with certain provisions, and we thought at one time that this issue was resolved in the RAMA tests which

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BH NRC-119 T-5 showed deficiencies, so we received a letter from FEMA that said our previous thoughts about the adequacy of emergency planning in that area were no longer true, and that is when we withdrew our certification.

MR. GOLDBERG: Mr. Chairman, to just elaborate on that a little bit, there was litigation of all the emergency planning concerns. The board noted some problems with communications in the area of emergency planning. As a result of the problems that it noted with communications, it imposed a license condition that there must be held prior to restart a communications drill similar to the one suggested by the Commonwealth. Now, what happened was there were some deficiencies that resulted from the communication drills which FEMA communicated to us. So, these are the same kinds of communication problems that were the basis for that license condition. It is our position, therefore, that we cannot certify that item until FEMA determines whether its concerns and the deficiencies it identified have been resolved.

CHAIRMAN PALLADINO: Yes. I remember now the license condition. Okay, thank you.

MR. DENTON: The next item I want to cover in what we call the certification issues, there is a number of issues over the years we have identified that

the staff needs to certify to the commission have been completed. We anticipate having all those completed and certifications made to the commission by about Mid-September. So, I don't propose to go into those, but there are a number of those that we have not yet certified to you. Some include equipment qualification issues that were mentioned earlier today. We are pursuing those, awaiting from additional information from the licensee on some. It is our best estimate that those issues would be completed by about mid-September.

commissioner Asselstine: So, that would include all the EQ issues? I noticed we got a note saying that the licensee wasn't ready.

CHAIRMAN PALLADINO: Yes, I think you issued a decision on July 26, asking us to look specifically at radiation effects. That is where, I think we don't expect information from the licensee that we need until sometime after the 20th of this month. So, mid September is assuming that the licensee provide satisfactory information in that area.

But, that's the date that I would project for otherwise completion of all the commission certification items.

The last item I wanted to mention the steam

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generator hearing. The hearing itself is complete. We are waiting a board decision. It is the staff's estimate that the decision might be forth coming around the end of September. That's an area we need to settle since the last commission vote on that was 2-2. There have been some new developments with regard to the steam generator. I wanted to apprise you of. Some loose parts were found in the bottom of the steam generator recently. These are plugs from the, that were used to plug the bottom tubes, this is not from the top repair, that was a subject to rejutification. We required the applicant to do some tests on those. These tests have revealed about 5 out of the 10 plugs that were tested recently were pulled out prior to their calculated strength where they should have stayed in.

So, it is clear that this issue is going to have to be resolved before the plant would be physically ready to operate.

CHAIRMAN PALLADINO: Are these plugs welded in?

MR. DENTON: These are roll plugs, Mr.

Chairman. I understand there are about a thousand of them. They have been used, explosive plugs, and mechanical plugs have all been used before. This plant probably has the most extensive use of roll plugs of

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1 any plant.

COMMISSIONER BERNTHAL: May I just suggest that we start referring to these as loose plugs, instead of loose parts? In fact, or are there other loose parts?

MR. DENTON: I think these are the parts that were referred to.

COMMISSIONER BERNTHAL: That's what I thought.

COMMISSIONER ASSELSTINE: You want to start thinking of a loose plug monitor?

COMMISSIONER BERNTHAL: This is a case where a euphanism is not euphanism.

MR. DENTON: These are the items I wanted to cover. We have a number of staff here who can cover these in more detail. But, I thought these were the most notable issues that remain to be completed to the staff's satisfaction. As you heard this morning, there is a great deal of difference of opinion as about where the other issues have been completed adequately or not. But, these are the ones that we see, that are impediments to te staff saying the plant is ready to go.

Subject to satisfactory resolution of these, we would conclude that the plant has been completed in accordance with the commission regulations and can

BH NRC-119 T-5 be operated safely. I did want to comment briefly on the issue that came up during the Aamodt's presentation this morning throughout the survey that had been done showing unexpectedly high rates of cancers. I think it is highly likely that such a situation exists, could be related to the accident. You probably recall that at the time of the accident, every Federal and state of Pennslvania agency that had any expertise in radiation monitoring was involved in monitoring. There were federal groups, that included the NRC, EPA, DOE, HEW that wrote a report on how much radiation got out. best estimate of that inter-governmental group was that the maximum dose anyone could have received if they had stood in the worst location during the entire time was on the order of 100 millirem. Scientific tests for many years showed you would not expect the kind of results that are being quoted today based on the release of 100 millirem at the location of the north gate.

But, since any staff review of that probably would not be believed either, I suggest the commission may want to refer that to a Federal Agency with expertise in epidemiology, such as the Center for Communicable Diseases, or EPA, or someone else who is skilled at looking into patterns of disease in agighborhoods and drawing conclusions from it.

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BH NRC-119 T-5 COMMISSIONER BERNTHAL: Hasn't the state of Pennsylvania done or tried to do an epidemiological study of...or is that het the case?

MR. DENTON: There were two studies that I am aware of. One was done by the state, but that was focused on the occurrence of birth defects, and whether or not any impact of the plant on birth defects could be seen. There is another study that is being funded as a result of a law suit, and the, I have forgotten the name of that group. But, there is a, as a result of the citizen's banding together who were involved in that, there is, the court's did establish an epidemiological study that is going on. That is being administered through that process.

CHAIRMAN PALLADINO: Could we get some supplementary information.

MR. DENTON: I would be glad to provide additional information on what is going on. It is my understanding that that group was doing an epidemiological study. The NRC is not sponsoring epidemiological studies, that is clear. I think that when a small survey like this is done, it is best to refer to someone who has a long history of dealing with epidemiological studies, and trying to deal with it several years ago, it is a difficult subject. You may

BH NRC-119 T-5 recall there were studies that were done regarding hypothyroidism, and whether that was unusual in the area. I think the health officials are the proper ones to refer that sort of study to.

COMMISSIONER BERNTHAL: I don't know what the best procedure for questions is. It may not be so good to come back four times to the same issue, so if you don't mind, I would like to ask another question on that subject. I think that the Aamodts have represented some people, and perhaps some animals to say nothing of structures and inanimate material, may have been exposed to levels of radiation in the neighborhood of 100R if I am remembering correctly. That's a thousand times greater than the suggested maximum possible dose that you have made. Unless that were a very very soft radiation, shouldn't you be able to, even today perhaps determine from careful analysis of materials in the area where doses of that size were alleged to occur, whether that could possibly be the case.

MR. DENTON: This was as thoroughly studied accident as we have ever had, Commissioner. Once the Federal agencies were there in force, every agency was independently taking samples and making analyses. The documents that were published were the conclusions of all of the agencies involved. I think it is extremely

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BH NRC-119 T-5 unlikely that radiation levels 100 times greater than estimated by the council were released. A thousand times greater.

COMMISSIONER BERNTHAL: That's based on what, analysis of looking for residual radioactivity, or was there...what I am suggesting is that the physical effects of a level of 100R, a dose of 100R from what I remember of radiation physics suggests that you had still today probably be able to find the physical effects on perhaps on glasses and things of that nature.

MR. DENTON: I think that sort of thing was studied at the time, Commissioner. A film was gotten from drug stores, for example, where there have been this film would have been in the store during the time of the accident, and attempts made to look at that. I remember whole body counting of individuals, extensive soil sampling. Milk sampling was done, and there were, right after the accident, a lot of occurrences of what people thought were related to the accident, we retained the services of the Department of Agriculture where it was concerning crops and animals and wildstock to look into those. There were several reports written as a result of those kinds of studies to see if in fact we could find and I think the punincy and integrity of

the professionals who were involved at that time, all indicating to the State of Pennsylvania to try and find the effects. That is extensively documented, so I think the study is very small and it just needs to be

referred to a group that specializes in that.

CHAIRMAN PALLADINO: It was my impression that your radiological protection tried to respond to a number of suspicions of radioactive pockets to see whether or not it existed and what level it was there...

MR. DENTON: I think the difference between what you would expect at those levels were projected and what was being talked about here, is...makes it highly unlikely there is a cause and effect relationship. But, I do think if the staff were to produce a study, it would probably be equally suspect because of the accusation of somehow there was a massive coverup involving every Federal Agency. That's why I recommend referral to some agency that specializes in it.

COMMISSIONER ASSELSTINE: I notice the staff's response, to the Aamodts' petition had identified some of the studies that had been done at or following the time of the TMI accident. Is that a comprehensive list of all of the studies or surveys that might have

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addressed this kind of a question, and if it isn't could you maybe provide as with a list of the other studies or surveys where these kind of concerns or questions have been addressed?

MR. DENTON: We'll certainly do that. COMMISSIONER ASSELSTINE: Okay.

CHAIRMAN PALLADINO: Any more on the question of the...

COMMISSIONER ZECH: I would just like to see those studies, and I think it is a very worthwhile subject and I appreciate the Aamodt's bringing it up, and I think it deserves looking into again. It is certainly is so important in my judgement.

CHAIRMAN PALLADINO: As I do recall, there were a lot of reports issued on the subject. I am not saying that they are the last word, but.

MR. DENTON: It's unfortunate that 20% of us will probably die of cancer in today's population.

Then, the question that you find an occurrence in a neighborhood or small areas that has had to you some local effect or is it just random occurrences. We faced that sort of question before, and I think generally we do have to enlist the health agencies for bringing their expertise to bear.

COMMISSIONER BERNTHAL: Who would be the

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appropriate agency that has not already been involved in, perhaps therefore disqualified in the studies that have been done?

MR. DENTON: As I said, I think almost any agency with any capability in this area was involved at the time. But, typically, if it came up in some other location, I think our first choice would be to go to the CDC in Atlanta as having a unique capabilities in this field.

COMMISSIONER ASSELSTINE: Were they very actively involved in the past?

MR. DENTON: I think they had a representative or two during the studies, yes. You may recall that the secretary of HEW Calafono at the time, gave his view that the 3,000 man rem that were projected, the total exposure from the accident might cause about 1 cancer in the population.

JMMISSIONER BERNTHAL: I would just suggest that we might investigate whether they would be an appropriate agency to, at the very least go through this volume, these volumes of studies that have been done, and then make a decision on anything further as appropriate. If so, in any case, it might be useful for them to initiate such studies, perhaps not just here but it's worthwhile in general, I think to carry out.

BH NRC-119 T-5 MR. DENTON: Previous discussions with the commission point out that it is extremely costly to do, have to run from long periods of time in order to get reliable statistics.

CHAIRMAN PALLADINO: Well, I think we ought to examine the question. We know that there was a lot of work done at the time of the accident which begins to fade, in memory unless 17m refreshed in them.

MR. DENTON: This concludes our plan presentation. There were a number of things that came up today. We could respond as the Commission is interested.

CHAIRMAN PALLADINO: Let me start with two questions. One, could you comment about some of the remarks regarding training that have been made during the course of the day, particularly dealing with Ms. Weiss, but not only by Ms. Weiss, the basis for any conclusions, or the conclusions that you have drawn with regard to training and the extent to which the issue has been litigated?

MR. DENTON: I'm sure you remember, Mr.

Chairman that we sent the letter to the licensee requiring the retest of all operators after we discovered he cheating incident had occurred. Since that time, we have paid special attention...

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CHAIRMAN PALLADINO: What year was that, 1982?

MR. DENTON: Someone refresh my memory, Bill?

MR. RUSSELL: April of 1981.

MR. DENTON: April of 1981. Since that time, this area has received a lot of attention by our inspection staff and our headquarter staff. Let me have Bill Russell describe what is going on since that area. Some of this information is contained in the report 0680.

MR. RUSSELL: In reviewing the training area most of the information which is covered in Nureg 0680, in Section 7.3 is information which is outside of the record, and was developed as part of the proceeding. Some of the activities that the staff has been involved in, have involved review of training at the point of delivery. I had two people on my staff go down to the B&W simulator at Lynchburg and observe the operator training and the performance of the operators on the simulator to respond to some of the concerns about whether the training reveiws were in fact reviews of paper and process or whether it was actually a review of training. The conclusions of those individuals was that the training was effective, and that it exceeded NRC requirements in the area, and in particular the performance of Mr. Ross, who was the supervisor of that

BH NRC-119 T-5 particular team, his performance on the simulator was quite good.

In addition to that, in Pebruary of this year, there was an extensive review including interviews and questioning of all the operators at the plant that was documented in the inspection report. I believe it was in early February. Of those inspections and evaluations that with citations to the record, the document that staff used are all contained in section 7.3R report. They do cover matters which are outside of the record that was developed.

MR. DENTON: I think Tom may also like to comment on that.

MR. MURLEY: Just to elaborate on that last point that Bill made, we conducted an operational readiness assessment this spring, I guess it was in February. This was a team of experienced examiners from the region, from other regions, and also from our Chatanooga training center. We went to the plant, we interviewed most of the plant operators. Some of them were not there, they were away on training. We did face to face interviews. This went well beyond any inpection or any assessment that we do for any other plant for the normal mode of business, for example. We did not do such a thing for Susquehanna 2, to give you an example

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when they recently got licensed.

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BH NRC-119 T-5 What we found there was, although there were some weaknesses in some of their knowledge. We attributed this primarily to a general rustiness, the fact that they haven't operated the plant for the last 5 years. We none the less found that the operators were well trained, and in our judgement capable of operating the plant and this is documented in our inspection report, and it is referred to in the report here as well.

CHAIRMAN PALLADINO: Ms. Weiss made the statement that the incidents beyond question showed a lack of NRC'S, as well as the licensee's, attention to training. I gather you say the evidence goes the other way?

MR. DENTON: There have been so many developments since that time...

CHAIRMAN PALLADINO: I forgot to ask her what about evidence on the record or the total...

MR. MURLEY: I think she was.

MS. WEISS: Yes.

CHAIRMAN PALLADINO: Let me ask my second question. Ms. Weiss asked a question that I was prepared to ask you also. You said that had you known what you knew now, you would have probably given

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different conclusions or observations to the hearing board. Question team up, well, didn't you know any of the things at the time of the hearing? What is it that you didn't know, and why didn't you know it?

> MR. DENTON: Well, I didn't know it. CHAIRMAN PALLADINO: Well, the staff.

MR. DENTON: The history of that, at least my understanding of the history is that the region, Tom maybe you can help me, had begun investigating the Hartman matter. It accumulated quite a bit of evidence when the Department of Justice asked the staff to seal its own investigation so as to not interfere with the Department of Justice review. We had assumed that the Department of Justice would complete its review far sooner than the staff would get through with the other items in the review, and that that would become available.

So, in effect very few people in the agency knew what Justice knew. Justice had in fact asked the people who intereact with them not to talk about it for fear of prejudicing their case. So, as we were moving along, we had assumed that this area would be taken care of before it was. Then, when the case was . reopened, suddenly I became aware of information that had otherwise been protected at the request of justice.

CHAIRMAN PALLADINO: Is that only the Hartman matter that you were referring to?

MR. DENTON: Well, then there was the B&W lawsuit review which revealed a great deal more information, and then as the, there were things like the RHR and Beta report, and it was that information that led me to write in April of 1983 because of the law suit record, the Hartman allegations, the Parks and King allegations, the Beta and RHR reports, and the failure to provide those to the board, that we felt we should suspend any judgement in that until they can be investigated, that then led to the 9 investigations by OI which provided a great deal of new information that, and during all of this time changes were occurring in the licensees organization, and we have reflected all of that in the report.

But, the question of why didn't we know it at the time is either those investigations had not been done, or that information wasn't available.

MR. MURLEY: That's generally right. I, please keep in mind that my involvement with TMI before I went to Region I was almost nill. I have tried to avoid going back into all of that myself. I would point out also that the GPU and B&W trial record brought out a number of things. I don't know if you mentioned that,

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BH NRC-119 T-5 that the staff was not aware of. That is a reason ...

MR. DENTON: We spent some...we spent five man years reviewing almost 100,000 pages of that. That was part of the basis for requesting investigations in certain areas.

CHAIRMAN PALLADINO: Ms. Weiss made the claim that you knew a nubmer of these things, or should have known them.

MR. DENTON: Would that we were omnipotent.

CHAIRMAN PALLADINO: I have one other question. We received letters from several individuals mentioned in your report. I don't know if you had a chance to look at them, but they raise the question on whether or not we have done an adequate job of our investigation, particularly one of them who says that "my name, had been provided with a copy of a statement of facts referred to me...to, by the staff, my name is not included in the document. Apparently, the staff relied upon the identification of certain position titles in the statement of facts that conclude that I was involved. That conclusion is unwarranted and incorrect. I assumed the position of superintendent technical Board to TMI2 on December 1, 1978. Prior to that time, I was not assigned to TMI2, nor was involved in this operation. The incidents referred to in the

statement of facts involving the superintendent of technical support took place prior to December 1, 1978. Thus, there is no basis for the staff's assumption that I was involved". I wasn't trying to get into the details of it, but it seems to raise questions as to whether or not we had done an adequate job on the investigations and related matters that led to an inclusion of some of these names in that report.

MR. DENTON: We relied, we took as given the adequacy of the OI investigations. Our call is based on reading those investigations. We asked them to pursue this issue, now that is why we mentioned earlier that you might want to consider having people comment on either the OI investigations or our interpretation of it. We took that as a given, and we called it the way we saw it. I wouldn't be surprised if the people who are mentioned in there don't have differences of opinion. We did see that letter this morning, Bill would you like to comment on it.

MR. RUSSELL: I guess that the confusion is that the position of the supervisor of technical support at TMI2 was held by two different individuals over different periods of time on those activities of those individuals were reviewed. There were discussions between OI and the US attorney concerning the

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involvement of those individuals. There is also the OI investigation report, the Martin report that came to Judge Plaine, and the documentation that was available on that, which I reviewed at the offices of OI in region 1 and reviewed extensively afterwards. The two letters, if you take them at face value, one individual claims it happened on the other person's watch. The other individual claims it happened on the other guys watch. So, there were two individuals there. The position was named in the indictment, and there were events that occurred during both individuals tenure in that position which raised questions which clearly in my judgement involve them in the activities.

CHAIRMAN PALLADINO: Well, this particular individual claims that it all happened before his watch.

MR. RUSSELL: There are other events which occurred, I believe that you are talking about the second individual that was the supervisor of technical support.

CHAIRMAN PALLADINO: Okay, well, I'm interested in your comments, and I do think that there is merit in getting comments on your 0680, but I will have to refer to how the whole commission feels. Other questions?

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back on the petition that Mr. and Mrs. Aamodt had filed. I noticed that Attachment 3 to their petition included an August 8, 1979 letter from a state representative to then Chairman Hendrie outlining some of these concerns. I wonder also if you could look back and see what if anything was done in response to that letter. That would be helpful to me as well.

CHAIRMAN PALLADINO: Alright.

MR. ASSELSTINE: I had two other questions.

One has to do with the appeal board's management decision. It's decision on reopening the record. In the staff's view, is the record sufficient to serve as a basis for a merits decision as supposed to looking outside the record at this other information that the staff tends to rely on so heavily. Is the record itself sufficient to support a restart decision of merits review? I am particular concerned myself by the conclusion that the staff reaches in its recertification, that if they had known then what they know now the staff likely would not have come out in favor of positive finding on management competence and integrity. That is something I haven't seen the staff's position on:

MR. GOLDBERG: When the licensing board issued

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when it issued its decision on the cheating issues, the staff reviewed those decisions and we concluded that the licensing boards findings and conclusions which were favorable to restart were supported by the evidentiary record. We do not take any appeals from those decisions because we thought they were sound decisions. We continue to believe that based on the evidentiary record, there is support for the licensing board's partial initial decisions which are favorable

There are concerns which have arisen outside the evidentiary record, and there have been solutions proposed by GPU, and investigations done by OI, and analyses done by the staff outside the context of the evidentiary record which addresses those concerns.

Me believe that if the commission wants to make a restart decision based on the evidentiary record, that they can do so, because there is support for the licensing board's findings. However, if the commission wants to look at material that they have been provided outside the evidentiary record, because they are making immediate effectiveness decision without prejudice to the appeals which the commission may or may not hear on.ALAB 772. They can base their

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to restart.

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BH NRC-119 T-5 immediate effectiveness decision on all the available information they have. That would be for the sole purpose of lifting the immediately effective suspension while the appeals pursue, or are pursued in the normal course.

COMMISSIONER ASSELSTINE: In terms of the appeal, on ALAB 772, what's the staff's position on reopening the record on the items that were identified by the appeal board for purposes of a merit's decision on the appeal.

MR. GOLDBERG: The licensee filed a petition to have the commission review ALAB 772. We reviewed 'their petition and determined that we did not oppose the petition. We believe that they did state sufficient reasons for the commission to take review of ALAB 772 on the merits. Therefore, we didn't oppose it under our rules. We were not permitted to file a response. We did send a letter to the commission though, indicating that we did not oppose it.

COMMISSIONER ASSELSTINE: Well, beyond that, can you give me what the staff's position is now? Do you think the appeal board is right on reopening the record, that the record is deficient in terms of those particular items in terms of the merits of the appeal itself, or like the licensee do you think they were

wrong.

MR. DENTON: I would observe that we are actually in that proceeding, and I guess discovery is beginning. Absent Commission action, we take that as a definite decision by the commission. I understand the hearing starts in November and a decision is expected mid next year.

CHAIRMAN PALLADINO: I think that's one of the questions we in the Commission have to decide.

COMMISSIONER ASSELSTINE: Well, I think that is one in fairness, that is one of the issues that we wanted to discuss today.

MR. DENTON: But Jack may want to offer a view on the legal situation. I think from the staff's view, we are tearing it out as we interpret your directives.

MR. GOLDBERG: I don't have too much to add.
We believe that the licensing board decision was a
sound one. After reviewing ALAB 772, we did not change
our conclusion that the licensing board's findings
favorable to restart are supported by the evidentiary
record. The appeal board did not see it that way, they
thought there were some deficiencies that were worth
exploring. We didn't necessarily agree with that
judgement, but, by the same token, we didn't challenge
that determination other than to not oppose the

BH NRC-119 T-5 licensee's petition to have the commission review that decision.

COMMISSIONER ASSELSTINE: The second question I had, had to do with the draft order on TMI cleanup, in terms of an order with the schedule, proceeding with the cleanup. We discussed that a little bit this morning with Governor Thornburg. In the interim I asked OGC where that stood. They indicated to me that they prepared to draft about a month and a half ago. It had been sent to the staff, and that is where it was. Could you tell me where that stands. I know that when the commission asks, it asks that an order be prepared. wanted it done so that we could act on it when we next met, or prior to meeting with the advisory panel, which I think is scheduled for next month again. wondering where it is, and if we could maybe could get a committment to get it fairly quickly, within a week or so.

MR. DENTON: Yes sir. I have seen that. I think the staff is, will have it down here next week.

CHAIRMAN PALLADINO: I did a little checking also, and what I was told was that it had been prepared and has been sent to Mr. Dirks and is on his desk.

COMMISSIONER ASSELSTINE: Is that required or is this...

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CHAIRMAN PALLADINO: I get this about third hand. So, I would like to confirm.

MR. DENTON: We have had quite an interchange between the legal staff to be sure that we addressed all of the issues that we could. That is why it took as long as it did. We think now that there is general agreement among participants in the drafting process, and I think with certainty, you will have it next week.

CHAIRMAN PALLADINO: Okay. Other questions?

COMMISSIONER ASSELSTINE: Let me go back to the other question on the record in ALAB 772. I guess I am a little bit troubled by not getting what I would see is a clear cut answer from the staff one way or the other on whether they think that the record ought to be reopened or not. Whether the appeal board is right or wrong. It does seem to me that, you know, the staff ought to be looking to what they think is in the public interest in this case, whether the record is adequate or not. I guess, maybe it is not a question, maybe it is more a comment. I would have hoped that there would have been a more active and definitive judgement by the staff one way or the other on what they thought about

MR. GOLDBERG: Well, with respect to reopening

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record.

the appeal board decision and the adequacy of the

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BH NRC-119 T-5 on a number of issues that were raised by the parties, we did look at everyone of those carefully and file a response which represented the staff's best judgement as to whether or not the commission standards for reopening the record were satisfied. So, we have called each one of those as we have seen it according to the appropriate standards. Similarly, we reviewed very carefully the appeal board's decision. They identified certain concerns that they had. We did not think that the record was deficient in the areas which the Appeal Board identified. However, we recognize that their judgement was just different from ours, and we were not going to seek review of that. When the licensee filed its position for commission review, we recognize that from their point of view, there were important issues involved, and they sought to have the commission reveiw that situation. From their perspective, we could not disagree with them, that it wasn't an appropriate decision for the commission to review.

So, we didn't oppose it. We, I can only reiterate that if we limit ourselves to the evidentiary record, the staff believes it is adequate to support a restart decision.

COMMISSIONER ASSELSTINE: Let me ask you one final question on that. You think the evidentiary

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BH NRC-119 T-5 record is sufficient for purposes of making a decision, and yet we have this certification from you that says if you knew then what you know now, you wouldn't have come out with a positive finding. What weight can we give to the staff testimony that is in the record?

Do we basically have to discount it and throw it out and rely only on the other evidence in the record?

MR. GOLDBERG: I think that if the commission wants to deal with the issues which have been raised since the close of the evidentiary record, then certainly they have to look to all of the available information which they have, which consists to a great extent the OI reports, the licensee's evaluations which it has submitted to the commission, and the staff's analysis of the OI reports. Those are not in the evidentiary record for sure. However, in our July 26 comment to the commission, we did point out the distinction which is even reflected in the commission's rules, between their immediate effectiveness review, and the review of the issues based on the merits based on the evidence. There is a distinction, it is reflected in our rules, and it is reflected in a number of prior condition cases in dealing with suspended licenses. We have cited those in our filing. There is

legal support for the commission to make its immediate effectiveness decision on the basis of the information which they have, some of which is not in evidence.

COMMISSIONER ASSELSTINE: Let me set that question aside for the moment, and just focus on the merits review. Don't we have to basically discount all of the staff's evidence, all of its testimony in the record when we do the merit's review, if we are going to rely on the record. Because, the staff has said, that wouldn't have been our position. Our position would have been different. In fact, it would likely have been just the opposite. So, for purposes of the merits review, if we are limited just to the record that we have now, don't we have to throw out all of the staff's testimony?

CHAIRMAN PALLADINO: Or, at least don't you have to consider new testimony.

COMMISSIONER ASSELSTINE: I think, basically, that everything they said was thrown out.

CHAIRMAN PALLADINO: In case we say, well you can't throw away old testimony.

MR. DENTON: That would be one way, but we want to...

COMMISSIONER ASSELSTINE: The other way is to reopen the record.

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BH NRC-119 T-5 MR. DENTON: Are, yeah, that is another way. But, if I don't get trapped in a process here, what we did when we discovered things that said we have concerns about GPU management and particular managers in view of information that is coming to life, that is when we went to work having the investigations and doing the reviews. GPU's response to some of the information that began to develop began to change their management around. So, I think from my standpoint, this is, would be our basis now for our view of the company, and it is no longer the same company that existed at the time. It's not the same people that were there during that hearing.

Then, the question of whether that should be reajudicated, I think is a good policy question for the commission.

(Laughter.)

MR. DENTON: You are going to have to face that one. Other questions?

COMMISSIONER BERNTHAL: Well, I am certainly not going to try and detail the issue we have just been through, because I haven't even had one course in logic, so.

COMMISSIONER ZECH: Mr. Chairman, if I may make one statement too, I think it is our

responsibility. As I understand, the problem, and I think I am understanding it, but it is a problem that the commissioner's have to face in our judgement and we are going to have to make that decision. As soon as we are ready to do it, and I hope it would be very soon.

It is a very important issue, and I think that it is our responsibility to take this one on.

COMMISSIONER BERNTHAL: I agree. In fact, I have in my notes to myself here, where are we going here today? I mean, we certainly in a sense are sitting here now for six hours or whatever it has been considering a procedural issue to be sure. But, we are also sort of gathering other information in the process here. Finally, Jim and others I think have pinpointed a key procedural decision that we have got to make. probably, certainly applies to this case especially, and probably to other cases as well. I would like to see us straight forwardly address the question of whether we are going to make a decision based on extra record material. I would also like some comment right now if we can get it, in connection with that as to whether there is precedent for the commission simply to, whatever the time it takes to take the extra record material and resolve these issues for itself. Is there a precedent for the commision doing that without going,

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BH NRC-119 T-5 I mean we have a record that we are talking about here that is 2-1/2 years old. Is it simply inconceivable because of the amount of material, or is it unprecedented or impossible otherwise for the commission itself, perhaps for reasons of time if nothing else to take up these issues?

CHAIRMAN PALLADINO: I think the commission in its 1981 order tried to clarify some of these points. This is what I was referring to earlier. It really keeps it for itself eventually to make the decision. complained about anyone reading a sentence out of a paragraph, so I guess I have to read a whole paragraph. The commission has decided against the appeal board's stay authority, because this case differs significantly from normal, initial operating license cases. decison by the commission rather than granting effectiveness to a licensing board decision would be determined based on that decision and other factors whether the concerns which prompt the original immediate suspension order of August 1979 justify continuation of that suspension. They do not, and the commission therefore can no longer find that the public health and safety, the public health, safety and interest mandates this suspension, then commission is required by law, whatever the nature of the licensing

board's decision to lift that suspension immediately.

This is a matter of peculiary within the commission's knowledge, and involving the most discretionary aspects of this enforcement authority. I think it does beg for us to go back and read the various orders, but this was an attempt to interpret, set an interpretation of the very question we are discussing now. That doesn't mean the commission is bound by it, except that everytime we change, there is a basis for further confusion.

COMMISSIONER BERNTHAL: Well, but there is clearly one path that we can take. In the end, I don't think we have to ask advice to pursue such a path legal or otherwise. We can simply decide that we are going to take whatever evidence we choose to take and whatever manner, I guess and make a decision.

CHAIRMAN PALLADINO: Well, I think this was intended by tell that back in 1981.

COMMISSIONER BERNTHAL: I frankly dislike the idea of getting distracted by questions of lifting suspensions and treating it a certain way under those conditions, and a different way if it were a new license. It has been 5 years, after all, so I think we ought to focus on the issues, and address them squarely. If it means the commission sitting here for

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40 hours in the next few weeks, we just ought to do it.

I may regret saying that.

COMMISSIONER ASSELSTINE: Are you suggesting Fred, you are suggesting that we conduct the hearing?

COMMISSIONER BERNTHAL: I guess I would like some advice on just exactly what the commission itself could do, rather than throwing all of these issues once again back on another body where we will go through the same process endlessly, maybe we ought to consider something else.

are in a far better position, procedurally, to advise how to grab hold of something like this than I am. I have two specific questions that I hope are short ones. There were some comments made that should be clearedup for the public record, I think on the evaluation of operations at Oyster Creek, whether it is better than most, poorer than most, indifferent, or what it is, and I think that someone here ought to speak to that for the record.

MR. MURLEY: As you recall, prior to GPU

Nuclear being formed, Oyster Creek was operated by

Jersey Central Power and Light. TMI 1 & 2 were operated

by Metropolitan Edison, both of whom were held by the

GPU as a kind of a holding company. Since PU nuclear

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BH NRC-119 T-6 has been formed, they are now the licensee that we deal with on both Oyster Creek and TMIl & 2. So, they come together, those two plants, that is Oyster Creek, and TMIl at the level of Phil Clark is the President, and Ed Kinter is the Vice President. Underneath them, there are a number of vice presidents and departments at their headquarters in Parcipiny that support both plants, emergency planning, engineering, and the typical kinds of support functions.

Oyster Creek in years past, has not been one of the better performers in the region. There are signs of improvement in their operation. I attribute it largely to actions that Phil Clark has taken to bring in good people. He has brought in Mr. Feedler, who is the plant manager of Oyster Creek. He is slowly, I think improving the opprations. That is the general assessment of my staff.

The plant, of course, has been shut down for the last 16 months for extensive modification. So, we have not actually observed it in actual operation. But, our impressions with that caviot is that Oyster Creek is improving in their general management and operations.

COMMISSIONER BERNTHAL: What were the most recent SALP reports and do they mean anything in view

of the fact that they have been shut down for that period of time?

MR. MURLEY: Yes they do. There were some .

other comments about SALP this morning. I would like
to just take a second. Typically, we carry out our
inspections over a course of a year, a year and a half.
We have resident inspectors at each site, and we have
about 100 and some inspectors in the region. They go
out and produce inspection reports, and we typically
find violations of our regulations. It's not uncommon,
for example, I think a rule of thumb is that we find
about one or two a month per plant. We have found some
at Oyster Creek, and we have found some at Three Mile
Island.

But, again, once a year we sit down and we conduct the systematic assessment of the licensee performance, the SALP. The purpose of that is to take an integrated look at how we believe the whole operation is being done. We have our senior managers from the region, and also from NRR come up. They help us in our evaluation.

We rely fairly heavily on the resident inspectors, overall, as well. What we are finding, is that at both TMI, and at Oyster Creek, that their performance is improving over the last, the previous

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SALP in the last year. So, with regard to Oyster Creek, of course, there are certain things we cannot evaluate because they are not operating.

But, we do observe how they follow procedures. We observe how they conduct their health physics operation, in fact, an outage is the best time to assess their health physics capability. We can observe their emergency preparedness. Most everything, except actual manipulation of dials by operators.

COMMISSIONER BERNTHAL: Can you give us a quick sense of, you guys use a, we use a 3-2-1 system. Can you give us some sense of where they have fallen, to the extent of at least that you can evaluate them?

MR. MURLEY: Yes. I resist trying to take a numerical average and making any comparisons. I think that is absolutely the wrong way to use SALP.

COMMISSIONER BERNTHAL: But, improving, which is the only word that you have used so far could mean lots of things.

MR. MURLEY: Yes. Now, I would say that there,
I tend in my own mind to lump the licensees, at least
in region 1 to a large group in the middle. Some are
clearly superior and some are clearly not as good. I
lump them in the large group in the middle.

COMMISSIONER BERNTHAL: Now.

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MR. MURLEY: Now, yes.

CHAIRMAN PALLADINO: When you say they, you mean Oyster Creek?

MR. MURLEY: Oyster Creek and TMI.

CHAIRMAN PALLADINO: Well, TMI as I recall ...

AUDIENCE: What does TMI say, what does EPRI say about this?

CHAIRMAN PALLADINO: Excuse me. I believe that it is important to give us an opportunity to discuss some of these questions. As I recall, the latest SALP on TMI had seven in category one. I've got three or four in Category Two.

MR. MURLEY: Yes. Then that indicates that it is, as far as I am concerned yes. Again, I would urge you to resist the temptation to take those numbers.

CHAIRMAN PALLADINO: I agree. I only wanted to find out what was there.

MR. MURLEY: One would have to look behind what is the substance is, yes.

CHAIRMAN PALLADINO: Okay. Any other comments or questions? Lando?

COMMISSIONER ZECH: I'd just like to thank the staff also for their presentations today. This has been a long day of oral presentations. We have, I think we have heard an awful lot of important comments and

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NRC-119 T-6 opinions and recommendations. I do think the commission has got to make a decision, an important one as to how we will proceed from here. I think we should do that very thoughtfully. I also think that we have an obligation to get on with the public health and safety consideration as well as the procedural consideration. With the considerations of whether or not we can authorize the plant to be operated again. So, we have some very important things to think about, and I think we should, we the Commission should take that responsibility on and get back as soon as we possibly can.

question about that. I would like to mention that we have scheduled a public meeting for September 7, at which we will consider the options before us, and the options coming in various categories. I think we have to address how we are going to proceed on these particular questions, and if possible, depending on the staff work that can be done between now and then, whether or not we have a decision of particular direction. But, I would hope that we can discuss the options before us, and reach a concensus on the direction that we want to take.

Following that meeting, both the commission

and the public, I hope will have a better understanding 1 of what sort of progress that can be expected in what time frame. 3

> CHAIRMAN PALLADINO: I too, on behalf of the commission want to thank the staff. I also want to express my appreciation for the efforts of all the parties to provide the commission their views on the issues before us.

COMMISSIONER ASSELSTINE: Joe, a couple of parties had reserved time. You haven't provided them with that.

CHAIRMAN PALLADINO: Oh, you are right. Okay, this is...thank you and we will...well, let's at least thank the staff so they can retire, and let's see, who was it that requested that. Remember the Aamodts had ...

We ought to have the Aamodts come first, and then the licensee.

MR. AAMODT: We would like to say we will keep it short.

CHAIRMAN PALLADINO: Okay, thank you.

MR. AAMODT: I think the first thing we would like to comment on is the Hartman matter itself. The staff's role in the early days of that, do you want to comment on that Margie?

MS. AAMODT: I really take exeption to what I

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heard here today, having participated in the hearing since September of 1979, when we got the staff's safety evaluation report. It clearly said that the Hartman matter was a matter that was not causal of the accident, that there was no indication of similar practices at unit 1, that it was only the second evaluation, first that it was only of historical significance and so forth. We didn't get the flavor at all of the leak rate falsification. Now, I understood from the May 24th meeting of 1983, from Tim Martin that the staff had essentially verified the Hartman matter, that I saw in Ornstein's notes that he had come to the conclusion that this matter was caused by the accident.

Now, I also take exception with Mr. Denton's saying that the trial record, the GPU V. B&W trial record was the thing that opened his eyes. Because that trial record essentially had not more in it than had been available in the depositions that had been taken by the NRC and by the GPU.

Now, we have this information in the reopened hearing. We had those depositions, and I attempted to bring this subject up to the special master at the end of the hearing. But, again got no support from the NRC. We raised this issue on April 6, in a brief that we filed by express mail on April 16, after we read

Stello's comments to you the commission saying essentially that there was nothing new in the GPU B&W court trial record, and that the Hartman, there was just nothing new there, and he rushed over the Hartman mater.

MR. AAMODT: We submit he knew there was something new.

MS. AAMODT: We went up then, to read the transcript when you gave this opportunity for us to comment, not to get new information. We knew about the Hartman matter. You just provided us with a window to get to you. We had tried to bring it up in the reopened hearing, for we simply went up, gathered the information from it to get the transcript numbers, but we knew about this matter. We just had no way to bring it to you. We had been, escentially closed out by the misrepresentation of the staff in the main hearing, and by procedural matters that we, not being lawyers were unable to come around in the second hearing.

When we brought it up, our document arrived on April 18, at 11:00 in the morning.

MR. AAMODT: Our motion did.

MS. AAMODT: Our motion did. Where we said that this is cause of the accident and so on, and so forth, and so on

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CHAIRMAN PALLADINO: Which are you speaking about?

MS. AAMODT: This was our motion of April 16th that arrived here on April 18th of 1983.

The following day, the NRC staff put a small document into the commission saving that we need to revalidate our position on management integrity. I just find it very hypocritical ...

MR. AAMODT: No. Just one thing, and they predated the filing of docketing. They lied about the day.

> MS. AAMODT: They dated it.

MR. AAMODT: The staff has lied on many occassions in our view.

MS. AAMODT: They dated it April 18th, and it was filed on April 19th, and it was essentially something that was already out of order. They had already had their opportunity to respond on the GPU B&W court trial. We can only reasonably conclude that because we brought the issue up on April 18th, they attempted to claim it for themselves so they would essentially hold control of this issue.

I just find that extremely hypocritical everytime I see it, because I know the amount of suffering that I went through to bring that issue into

the restart proceeding, with that document that we filed on April 16th, that arrived here on April 18th. But, be that as it may, our real concern was the statement about this health study. I would be very, very happy if the commission would like to hear from some of the people that we have interviewed in their homes. I know the problems with cluster health studies. I am a psychologist. I have done studies. I did studies for AT&T. I know that I am not a health person, but I have read many of the studies. I know that there are, can be unusual things that happen that can cause clusters of particular disease, but our areas are not contiguous. Our areas with this high cancer incidence, were all in a line from the TMI plants. A line where there were the intial releases, and they were on hilltops and elevations of the towers of the plant.

There were no records of radiation releases other than what GPU put forth for the initial days of the accident. The only other radiation measurement we have are the people who were out there in these areas where the releases went. I think their experiences are the accurate TLD's. I think what their experiences are saying from having talked to experts about their experiences, I have talked...sent...These studies have been sent to a number of experts, health physics

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experts over the country. They have invariably said, and Dr. Morgan is among them, Dr. Rosely Vertell, Dr. Bross, and so forth. The ones that we have listed, and especially Dr. Abramson, Dr. Coll. They have all said that these are, these are radiation effects. These are descriptions that can't be turned away from.

These people, essentially are the TLD's. We are simply asserting that licensee has lied because these people are saying things that are indicating as TLD's that they were the high, that they experienced high radiation dose.

COMMISSIONER BERNTHAL: Excuse me. You are referring to TLD's. You're just saying that these people, in your judgement, reflect the detection of large amounts of radiation.

MS. AAMODT: Yes. I am taking them as the measures rather than the licensee's reports or the other studies that had no information from the first three or four days. They had no information.

CHAIRMAN PALLADINO: Let me make one comment.

I didn't want to interrupt you, but we have been overtime for about the last minute and a half. I don't want to destroy the dialogue, go ahead.

COMMISSIONER BERNTHAL: Let me just suggest, as I did earlier, that it may in fact be possible; I

BE NRC-119 T-6 won't assert that it is, but it certainly may be possible after the fact to find clear evidence of whether clear levels of radiation of the kind that you suggested, 100R, could have been possible on the base of physical evidence, quite apart from animate evidence that you might find in the hearings.

Let me just, you can respond to that if you wish, but could you also then suggest a group or party or authority in your judgement would be appropriate to carry out such a study. Would you agree with the suggestion that the center for, what is it, CDC in Atlanta would be the appropriate?

MR. AAMODT: We would like to respond formally on that. We would like time to think about that. I don't think we should do that off the top of our head, but I would like to make this point, which I think is terribly important.

COMMISSIONER BERNTHAL: Is there any group of experts that you feel you would trust to do a study like that?

MR. AAMODT: Absolutely, and I think there are many more than a single group of experts who would. I have had great respect for the scientific community all of my life. This is the first time in my life that I have felt that I was dealing with a bunch of shmucks.

Honestly.

(Laughter, applause.)

MS. AAMODT: There are many independent people that we would know of. For instance, Dr. Morgan, Dr. Vertell, Dr. Johnson. These are all independent people who we can respect. They can't find any more out there than there is.

COMMISSIONER BERNTHAL: Is there any public organization that you would, any group like, that has broad responsiblity for such matters?

MR. AAMODT: We would like to wait to respond on that one.

CHAIRMAN PALLADINO: We would very much appreciate your response.

MR. AAMODT: Well, what I would like to do, I would like to comment very briefly to another one of Mr. Denton's comments.

MS. AAMODT: Your honor, could I just go back on the health issue for just minute. I just wanted to say on the health issue that there is a study by John Biay, of the source terms of that plant that is in GPU's hands that the court has not released, evidently the attorneys are still looking it over. But, we have had skutelbug that has come to us, information by the grapevine, that has come to us that this study is going

BH NRC-119 T-6 to overturn what GPU has been claiming, and that we won't look like we are saying things that are out of line.

So, I just warn you, and that is why we brought this motion to you as quickly as we could, so it could be factored into the management integrity phase of the restart proceeding. We are interested in the health issues, but we are even more interested that this plant isn't operated by people who don't tell the truth.

CHAIRMAN PALLADINO: Could you be very brief.

MR. AAMODT: Yes. I will be very brief. I'd like to point out that Mr. Denton pointed out how thoroughly this accident was studied. Bear in mind, that the county report, the senate, the Regovin and all of these people based their estimates of damage on the licensee's telling them nothing got out. In addition to that, your staff and the licensee saying there is about 2% core damage. We know that is not true. It is a whole new ballgame. That's it, and Mr. Denton knows that full well.

MS. AAMODT: I just want to say we did take a small geiger counter out to this area ourselves, and we did measure .1 millirems on the ground. Now, I haven't provided that information, because we haven't had been

227 1 absolutely certain of the calibration, although we have 2 no reason to believe because it did calibrate with the 3 Newberry township geiger counter. But, .1 millirems, presently on the ground, 5 is ten times the background radiation. MR. AAMODT: And, you can run the numbers back on that and figure what was there that day. 7 8 MS. AAMODT: .1 millirams. It's .0008 and .0009 millirams. .1 millirams is on the ground. 9

COMMISSIONER BERNTHAL: It's not 10 times background, I don't think.

MR. AAMCDT: Sure it is. Background is .01.

MS. AAMODT: .009.

MR. AAMODT: Well, .0009.

MS. AAMODT: So, that would be .01, so that would be 10 times, isn't that right?

MR. AAMODT: Sure it is, a little over 10.

COMMISSIONER BERNTHAL: I'll check.

MS. AAMODT: That was just in one area. I just have to say this, though. I spent an entire week cross questioning witnesses in the main part of the hearing on training. This is formed, essentially the training record. This is essentially that cross questioning has become the training record that we are depending on. I am well acquainted with it. The reason that the issue

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BH NRC-119 T-6 has to be reheard is that the OARP report, that report, the OARP was based, the conclusions were based on data that was taken by the operators cheating on tests.

The company tests that were all on the 80's and 90's, on which the committee based their decision that these operators had done a good job on these particular courses. Those tests, the operators were all cooperating and cheating on.

MR. AAMODT: We know that now.

MS. AAMODT: That is the reason, the appeal board didn't directly say that, but that is the reason that the OARP committee must reconvene. But, what is on the record of the hearing is essentially data that was cheating in tainting it. The other point that I want to say is that the training department has the same instructors who was testified by Shipman, who was in charge of procedures. These instructors didn't take the training on TMI 2 events seriously. Fredericks, who is now in charge of operator training, didn't pass his own SOR examination recently. Newton is still there, who was there when there was the cheating, Samuel Newton. There was Mr. Cohe who was just appointed whose credentials in nuclear subjects is quite lacking.

CHAIRMAN PALLADINO: I very much appreciate your willingness to give us all that information. We

will certainly give it the careful attention that it deserves. Thank you very much.

MR. AAMODT: Thank you.

(Applause.)

CHAIRMAN PALLADINO: Can we have the licensee for a five minute rebuttal.

MR. CLARK: Chairman and Commission, four quick comments on this health effects issue which is of concern to you. Our filing of July 5th, lists the 6 major reports of which we are aware, which looked at after the accident, which do not rely on company data, and which did include extensive investigations and sampling around the site.

Second, in some of the comments today, even with regard to what Mr. Kuhns and I said this morning, I think that there has been considerable mischaracterizations of what we said, and I would respectfully request that in terms of what we have said, that you look to what we have said and not to how others have characterized it.

Third, as the staff testifed, I believe, the shutdown order can be lifted, and should be lifted now, and the extraneous issues, which are important, but which include emergency planning, include steam generator; can and should be dealt with seaparately by

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the proper procedures rather than part of this long and extended restart issue.

It appears to us that there are two cases you can consider. One is the evidentiary record as a whole, and without anything else. That evidentiary record of itself supports restart, and that's what I believe the staff certified. The second is the total record, evidentiary record and post evidentiary record as a whole and by itself. We believe that that record also supports restart.

CHAIRMAN PALLADINO: Alright. Thank you. Any comments or questions? Was there anyone else I overlooked? Well, then let me make my few closing remarks. We do want to express our appreciation for the efforts that the parties expended today in providing the commission their views and issues before us, and the actions that we ought to take.

We will take these matters into account in our future discussions and deliberations. I did indicate earlier, that we have scheduled a public meeting for September 7th, at which time we will consider the options before us. We will have some staff work done between now and then, so that we can better discuss the matter before us.

I hope that after that meeting, we will have

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a better understanding of what future steps we need beyond that. Anything more by any members of the commission?

We thank you all for coming, we will stand adjourned.

(Whereupon, at 4:42 p.m. on Wednesday, August 15, 1984 the hearing adjourned.)

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CERTIFICATE

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This is to certify that the attached proceedings before the NRC COMMISSION

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In the matter of: ORAL PRESENTATIONS BY PARTIES ON TMI-1 RESTART

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Date of Proceeding: Wednesday, August 15, 1984

Place of Proceeding: Washington, D.C.

were held as herein appears, and that this is the original transcript for the file of the Commission.

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BH NRC-119 T-6 66 JOE NEWMAN Official Reporter

DOE NEWMAN Official Reporter

PREPARER

SCHEDULING NOTES

TITLE: ORAL PRESENTATIONS BY PARTIES ON TMI-1 RESTART

SCHEDULED: 10:00 A.M., WEDNESDAY, AUGUST 15, 1984 (OPEN)

DURATION: APPROX 2 HRS.

BACKGROUND: PARTIES HAVE BEEN REQUESTED TO COMMENT ON WHETHER MANAGEMENT CONCERNS WHICH LED TO IMMEDIATELY EFFECTIVE SHUTDOWN ORDERS HAVE BEEN SUFFICIENTLY RESOLVED SO THAT THE COMMISSION SHOULD LIFT IMMEDIATE EFFECTIVENESS OF THOSE ORDERS PRIOR TO COMPLETION OF REVIEW OF ANY APPEALS FROM ALAB-772.

SPEAKERS:

COMMONWEALTH OF PENNSYLVANIA - GOVERNOR RICHARD THORNBURGH

- 15 MIN.

LICENSEE

- 30 MIN.

- WILLIAM KUHNS, CHAIRMAN GENERAL PUBLIC UTILITIES (GPU)
- PHILIP CLARK, PRESIDENT
- GENERAL PUBLIC UTILITIES NUCLEAR CORPORATION
- GEORGE TROWBRIDGE, ATTORNEY
- ERNEST BLAKE, ATTORNEY

NORMAN AND MARJORIE AAMODT

- 15 MIN.

TMIA

- 15 MIN.

- JOANNE DOROSHOW
- LOUISE BRADFORD

UCS

- 15 MIN.

- ELLEN WEISS

NRC STAFF

- 25 MIN.

- HAROLD DENTON
- JACK GOLDBERG
- JAMES MURLEY
- BILL RUSSELL

(THE PARTIES MAY RESERVE TIME FOR REBUTTAL.)

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