UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION * * * BRIEFING BY MAINE YANKEE, NRR AND REGION I * * * PUBLIC MEETING *** Nuclear Regulatory Commission One White Flint North 11555 Rockville Pike Rockville, Maryland Tuesday, February 4, 1997 The Commission met in open session, pursuant to notice, at 9:33 a.m., the Honorable SHIRLEY A. JACKSON, Chairman of the Commission, presiding. COMMISSIONERS PRESENT: SHIRLEY A. JACKSON. Chairman of the Commission KENNETH C. ROGERS, Member of the Commission GRETA J. DICUS, Member of the Commission NILS J. DIAZ, Member of the Commission EDWARD McGAFFIGAN, JR., Member of the Commission 2 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE: JOHN C. HOYLE, Secretary MARTY MALSCH, Deputy General Counsel HUGH THOMPSON, JR., Acting EDO EDWARD JORDAN, Deputy EDO FRANK MIRAGLIA, Director, NRR HUBERT MILLER, Region I Administrator DAVID FLANAGAN, Chairman of the Board, Maine Yankee MIKE SELLMAN, VP-Operations at Waterford, Maine Yankee, Chief Nuclear Officer (designee) DON HEINTZ, President and Chief Executive Officer, Entergy Operations PAUL STOVER, President, UWUA, Local 497 GRAHAM LEITCH, VP-Operations at Maine Yankee MARY ANN LYNCH, General Counsel and Vice President for Law at Maine Yankee

JERRY YELVERTON, Chief Operating Officer, Entergy Operations

- MIKE MEISNER, Director of Nuclear Safety and Licensing, Entergy PAT LYDON, Vice President for Finance, Maine
- Yankee DOUG WHITTIER, Vice President for Engineering,

Doug WHITTIER, Vice President for Engineering Maine Yankee

STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE: [continued]

BOB BLACKMORE, Plant Manager, Maine Yankee DON DAVIS, Chief Executive Officer, Yankee Atomic DAVID LOCHBAUM, Engineer, Union of Concerned Scientists

3

- WILLIAM S. LINNELL, II, Town Councilman, Cape Elizabeth, Maine, Committee for a Safe Energy Future
- RAYMOND SHADIS, Information Coordinator, Friends

1

of the Coast Opposing Nuclear Pollution

DANA CONNORS, President, Maine Chamber and

Business Alliance

PETER WILEY, Director, Special Projects for the

Governor, State of Maine

ULDIS VANAGS, Special Projects for the Governor, State of ME

4

[9:33 a.m.]

PROCEEDINGS

CHAIRMAN JACKSON: Good morning, ladies and gentlemen. The purpose of this meeting is for the Commission to be briefed on the status of activities at Maine Yankee.

This morning we will hear from the licensee, from the NRC Headquarters and Regional Staff, and from interested members of the public.

In late May of 1996 I initiated a charter with which the Commission concurred for special inspection of Maine Yankee, primarily to provide an independent safety assessment of the conformance of the Maine Yankee plant to its design and licensing basis.

This inspection was unique in its scope, independence, and coordination with state representatives. The Commission had the opportunity to review the report prior to its issuance and the Commission was briefed by the ISA, the Independent Safety Assessment Team, on October 18th of 1996.

We were briefed on the process used, the significant safety findings, and associated root causes and aspects of regulatory lessons learned that the inspection team gleaned which can be used to improve NRC processes. During that Commission briefing I requested a

. 5 follow-on Commission briefing once Maine Yankee had responded to the Independent Safety Assessment Team report. That response was submitted on December 10th of 1996.

The NRC Staff is continuing its review of that document along with comments received from interested members of the public.

The Commission is very interested in the licensee's response to the Independent Safety Assessment of their site, how they are correcting the root cause deficiencies and how they are verifying progress.

The Commission is aware that the utility must satisfy requirements of a confirmatory action letter and its supplement prior to restart of the facility.

The Commission is also interested in the Staff's summary of actions taken since the ISAT report.

Finally, the Commission has reviewed other views regarding the ISAT process and NRC actions regarding Maine Yankee in general and to that end has approved four speakers today to express their views.

Copies, I understand, of the presentations are available at the entrance to the meeting. If none of the Commissioners have any comments, we will proceed with hearing from the licensee, followed in turn by the NRC Staff, and members of the public who have been approved to speak today.

Mr. Flanagan, you may proceed.

MR. FLANAGAN: Thank you very much, Madam Chairman.

6

I would like to thank you and the Commission for the opportunity to appear here today and address the kinds of issues that you have outlined. I also would like to thank you for the courtesy that you extended in deferring the date until we had an opportunity to better define our relationship with Entergy before coming down here to meet with you.

This morning with me at the table are, from my right, Mike Sellman, who is the President-Elect of Maine Yankee, currently at Waterford; and Don Heintz, the CEO of Entergy Operations; our General Counsel and Vice President for Law, Mary Ann Lynch of Maine Yankee; and our Vice President for Operations, Graham Leitch; and Paul Stover, who is President of Local 497 of the UWUA at the plant.

Also with us today, sitting behind us, are -- and I'd ask them to stand as I say the names -- is Jerry Yelverton, who is COO of Entergy Operations, Mike Meisner, who is Director of Nuclear Safety and Licensing for Entergy; Pat Lydon, our Vice President for Finance at Maine Yankee along with Doug Whittier, Vice President for Engineering; and Bob Blackmore, who has the critical role as Plant Manager.

I am also pleased to have here with us for the first time Don Davis, who is the new Chief Executive Officer for Yankee Atomic.

With that, Madam Chairman, I would like to get directly to the issues that you identified at the outset. The first one is our response to the root cause analysis presented in the October 7th report.

What I want to tell you and the other Commissioners is that Maine Yankee agrees with the root cause analysis that was conducted by the NRC. With respect to economic pressure, Maine Yankee has been a low cost producer in a high energy cost region. Our management at the plant recognized the need for cost competitiveness but on reflection and after considerable discussion internally we agree that we focused so much on this aspect of our responsibilities that we failed to keep up with advances in the industry.

As we thought about it, we realized that that first cause, root cause, really led to the second root cause that you identified, which was a culture of complacency. It's not complacency in the usual, normal sense of the word, but what happened we believe is that line management came to feel that requests for additional expenditures not related to safety were unwelcome, and as a result work-arounds and backlogs began to increase.

8

But I don't want to leave you with the misimpression that these were universal characteristics and universally applied in all circumstances. Safety expenditures always got the highest priority at Maine Yankee and we always had a workforce that was characterized by having a lot of people in it who had a questioning attitude and were willing to innovate. Indeed, I should tell you in case you don't know it already, that Maine Yankee itself had already started identifying the complacency issue in the cultural assessment report that we did on our own initiative that was released in May of 1996, so we were capable of taking initiatives and some important ones were done.

Nonetheless, the bottom line is we concur with the two points, the two root causes you identified, and, by the way, we certainly also concur with the ultimate finding of the Committee that the plant was safe to operate.

In a moment I am going to introduce Don Heintz and Graham Leitch, who will talk about some major new developments at the plant, but as Chairman of the Board I think it is my responsibility to identify for you three responses we have taken at the Board level to address the root causes that you identified.

Those are in the areas of finance, governance, and management.

Speaking to finance first, you expressed a concern about the lack of economic resources being applied to the plant.

In contemplation and expectation of responding to the ISA on December 10th, we had a special Board meeting at the end of November, and at that time after a day-long discussion involving all the Board members, we agreed to a \$38.5 million incremental O&M and capital expenditure for 1997 to cut into that backlog and to bring to bear the kinds of personnel resources the problems appear to require.

That is over and above the \$144 million budget that already had been planned for 1997.

I want you to know that is not a one-shot deal. At the same time the Board explicitly discussed and authorized, going into the December 10th letter, a commitment to future incremental expenditures in subsequent years to make sure that those backlogs do not recur.

On an even longer term basis, we also adopted for the first time in our history a business plan which provides a template for what priorities should be for spending over the next several years, so that it is not a one-shot deal, it's not a two-year deal, it's a long-term budget reform that we have in mind.

If I could make one aside on this, because I think it is important, there was some concern expressed at the . 10 Commission that we do not deal appropriately with retained earnings and that somehow that was related to the economic resource issue at the plant.

I want to assure you that that is not the case. In fact, one of the advantages Maine Yankee has over other organizations is that it has sponsor agreements, binding sponsor agreements, with the 10 companies that own the plant that allow it to call for capital as required, as is evidenced by our current situation with cable separation and the additional expenditures needed to deal with that.

It would be an inefficient use of capital to retain earnings in Maine Yankee when it has access to the resources of the sponsor companies on a ready basis.

So the first issue we dealt with as a Board was the economic resources, the financial wherewithal to deal with backlogs and work-arounds.

The second issue is governance. If you want to correct issues, you ought to start at the top and one of the things, one of the first things we did when we saw these issues emerging was take advantage of a part-time Maine resident, Tom Murley, a man with considerable expertise both in regulation and in the industry, and we were fortunate enough to get Tom to agree to serve as an independent member on our Board of Directors at Maine Yankee and further to serve as a member of the newly-constituted Nuclear Committee . 11 of the Board -- and that is the second governance change that we have made.

We have reconstituted our old Oversight Committee into a Nuclear Committee of the Board that has this charter. It is, again in direct response to your inquiry, it is to monitor our progress with respect to fulfilling the ISA commitments, to fulfilling the business plan commitments, to fulfilling our commitments to INPO and to tracking our SALP scores and the cultural assessment team report that was done internally at the plant so that we have an ongoing regular reporting schedule for progress on that and accountability for it.

The third thing we did besides creating a committee with this charter was to equip it with some nationally-recognized outside experts, again both to give us advice and also to combat the notion that we were insular or introspective and disinterested in what the rest of the country was doing.

Ed Fuller, Bob Martin -- who was formerly with Region IV, John Townsend, who is with Diablo Canyon, and Bob Bradford, who is a Human Resources expert, serve on that panel and I can tell you that they have already given us substantial assistance in shaping the ISA response that we submitted to you.

The final thing that we have done in terms of . 12 governance is dramatically increase the number of Board meetings to keep us, the full Board, abreast of developments at the plant.

I think three or four years ago we were having four regularly-scheduled Board meetings a year. In 1995 we had seven. In 1996 we had nine and as Chairman I can tell you I expect that pace and that level of involvement and informed involvement to continue.

So finance, governance -- two of the key issues. But perhaps the most fundamental change is in the area of Management. We are very privileged to have with us today Don Heintz from Entergy, and I think the concept of taking a single unit plant in a relatively-isolated part of the country and bringing it into a circumstance where it can take advantage of some of the opportunities for learning and mutual consultation that a multi-plant system that is at the state-of-the-art and is well-respected and has turn-around experience could be a tremendous advantage to us, so the most important thing we have done is enter into this agreement with Entergy to give us assistance in the operation and the management of the plant.

We have also made internal changes in the management, both at Maine Yankee and, as Don Davis's presence indicates, at Yankee Atomic, and we will be assessing further changes in this quarter, but again I want . 13

to stress the high caliber and the dedication of the overwhelming majority of our employees and the good fortune we believe we have in having a constructive working partnership with our labor union. The physical and cultural changes that we have already initiated as part of the ISA process will be described in more detail by Graham Leitch, our Vice President for Operations, so I would just like to conclude

at this point by saying that under the leadership of Bob Blackmore, we fully and I believe efficiently cooperated with the ISA team while they were on site. We acknowledged the validity of the root causes that were identified. We submitted a comprehensive, achievable, measurable responsive plan on December 10th.

We have already made fundamental changes in finance, in governance, and in management, and we have got physical changes and backlogs underway and ahead of schedule.

We are committed to operating Maine Yankee safely and in full compliance with the expectations of the NRC.

That concludes my presentation, Madam Chairman, and I would be glad to answer any questions or defer to Mr. Heintz.

CHAIRMAN JACKSON: Thank you. Is Dr. Murley the only member of your Board with specific nuclear experience? . 14

MR. FLANAGAN: No. One of the representatives of Public Service of New Hampshire, Ted Feigenbaum, makes his career in nuclear areas and in nuclear plants, and I think that's the other --

CHAIRMAN JACKSON: Is Mr. Feigenbaum associated with Northeast Utilities?

MR. FLANAGAN: He runs the Seabrook plant.

CHAIRMAN JACKSON: Was Entergy involved in your December 10th ISAT response and is it evaluating the adequacy of it -- and/or is it evaluating the adequacy of that response?

MR. FLANAGAN: No, it was not involved in the preparation of the response. That was done by an internal team at all levels of Maine Yankee in consultation not only with the Nuclear Oversight Committee that I mentioned but a number of other consultants that were brought in and with Yankee Atomic as well.

It was in that period that we concluded that our best course of action might be to see what the opportunities for association with an existing multi-unit organization might be and we started exploring those options which brought us together during the month of December with Entergy.

CHAIRMAN JACKSON: So they actually are in the process of making an assessment of that response, as we speak?

MR. SELLMAN: Well, we will be soon. I'm going to be on-site Monday full-time. A number of people are joining me on Monday and we will be into a full-throttle assessment starting Monday.

CHAIRMAN JACKSON: I have to ask you this question, Mr. Flanagan.

Leaving aside the quality of the Entergy organization, from a structural perspective what in your mind distinguishes the relationship that you have established with Entergy and what are the strengths inherent in it compared to what seemed to be an implied criticism of your relationship with Yankee Atomic and the kind of separation in terms of ownership that that implied? MR. FLANAGAN: I think they are two quite

different relationships.

The one we contemplate with Entergy is much more comprehensive than the one that exists with Yankee Atomic. Yankee Atomic essentially provides engineering

services for Maine Yankee and has of course a historical memory of the various changes and design changes and initial . 16

design, and also provides fuel engineering services for us. We are looking to Mike Sellman and hopefully Mike Meisner and other people from Entergy to be involved with an across-the-board comprehensive management of all aspects of

the plant's operation and management, as any management team would be.

I think the advantages from our point of view, so they are not -- they are not comparable relationships.

We are looking forward to a relationship with Entergy because of the depth of their bench, you might say, the availability of experts in a wide range of fields to come up as needed, the depth of experience they have had, how they have dealt with issues at four PWI plants under their jurisdiction, their turnaround experience, both at ANO and River Bend which we found to be very impressive, and the management philosophy that I think Mike Sellman would bring to the operation.

So we see a number of advantages and, to the extent the Commission staff was right in thinking that Maine and New England were too isolated from what was going on in the rest of the country and what was going on with the state of the art, this seems like a transfusion that will be of more immediate help than if we went out and tried to pull together a management team ala carte, one by one, over a period of time.

. 17 CHAIRMAN JACKSON: You expect this to be an ongoing relationship for the indefinite future?

MR. FLANAGAN: There is a three-phase agreement. First, we had a memorandum of understanding which we signed early in January just to get started. Now we are in the process of signing a Phase I agreement that will carry us through this year and our contemplation is to have a Phase II agreement which will be a multi-year contract the duration of which hasn't been finally established yet. But long term is a key characteristic that we see

to our mutual advantage.

CHAIRMAN JACKSON: I am going to ask the staff, when they do their presentation, to tell the Commission what regulatory approvals they think do or do not need to occur. But I want to ask you, whom should the Commission consider our licensee to be?

MR. FLANAGAN: Unequivocally Maine Yankee. It is our intention to take advantage of the expertise and consultative services and contractual services of Entergy. But it is crystal clear to both parties that the Maine Yankee board and the Maine Yankee owners will continue to have all the responsibilities of a governing board, that Mr. Sellman will report directly to us, that he will come to us for approval on budgets, that we will elect the officers of a company and choose them and they will serve at our pleasure and all the incidents of ownership and board governance will remain as they are by mutual agreement.

CHAIRMAN JACKSON: If you concur in the ISAT's assessment in any sense that economic pressures played a role in getting you to where you are, what is there structured in your agreement with Entergy, which presumably is not doing this for free, that can give the Commission comfort that that kind of a tension may not be inherent in the contractual relationship?

MR. FLANAGAN: The contract can only work if it is mutually advantageous. It is mutually advantageous if the plant is on line and operating. We recognize that that requires financial commitments in order to eliminate this backlog, eliminate the work-arounds and meet the expectations of the NRC and that's a condition of the agreement.

Entergy can walk away if they are not satisfied that those commitments are being met. On our side, you know, we are looking to an agreement that only -- only rewards Entergy if the plant is operating safely and efficiently.

So I think that there is a mutuality of interest and it is also consistent with and dependent on the interests of the NRC being met, satisfied.

MR. FLANAGAN: The Phase I agreement that carries us through this year is a flat, unconditional agreement for, in a sense, a retainer agreement that is not dependent upon operation. I can tell you that Entergy -- they can speak for themselves but I anticipate that Entergy will not be interested in a long-term agreement if we hadn't addressed the CAL issues to the satisfaction of the Commission.

In the longer term agreement, I believe it will be incentivized both by safety considerations and by economic performance, production considerations.

CHAIRMAN JACKSON: You haven't worked that out yet?

MR. FLANAGAN: It hasn't been finalized. The long-term agreement hasn't been finalized. We are dealing with Phase I.

I should also tell you, I should have said in my presentation that we have also -- one of the changes that we have made is for the employee compensation arrangement to make it clear that safety performance is essential in order to have a payoff. If there is production but no safety, . 20 there is no payoff. If there is safety but no production,

there still can be a payoff.

CHAIRMAN JACKSON: Mr. Heintz, would you like to speak to this?

MR. HEINTZ: Yes. We have been studying this sort of relationship for a number of years, about 18 months to two years. One of the things that we realize is that we probably have different incentive programs with each utility or any utility that we became involved with.

But very early on, you know, we made a commitment that we would not be interested in signing an agreement that was just based on cost because there are so many other things associated with safely operating a well-operated nuclear plant.

So even though we haven't worked out those details yet, it will be related to how well the plant is operated in the eyes of the regulator and safety indicators, along with operating a plant efficiently. So that would just be one of the measurements.

MR. FLANAGAN: Madam Chairman, another point I should have made that is very important is that one of the expectations in that Phase I contract is that Entergy will implement the ISA response proposals so since those -- since the very things you are talking about are already in our December 10 letter, I think it's covered.

21

CHAIRMAN JACKSON: Commissioner Rogers? COMMISSIONER ROGERS: No questions. COMMISSIONER McGAFFIGAN: I would like to follow. On this financial issue, your response says

basically it's not a structural problem, that the 38 million you have come up with in additional funds for the coming year points out it is not a retained earnings issue. And in looking at the response we received back in December, the Enclosure 7 of it, the retained earnings in Maine Yankee is only \$3.8 million, so 38 million is a factor of 10 larger and it is probably not practical to expect retained earnings to solve these sorts of problems.

Nevertheless, there is this question as to why the financing wasn't provided sooner. What was it that kept -implied in the press has been, and Mr. Frizzle, the former president, basically has said it's my fault, I didn't ask, if I had asked I would have gotten the money I needed to deal with these backlogs and to deal with these problems. Why was the financing issue not dealt with

earlier.

MR. FLANAGAN: As I indicated earlier, Maine Yankee has been a low-cost provider in a high-cost region and that's been an important factor to the benefit of the New England economy. We have wanted to run the plant as efficiently as we could, at the same time meeting the .

expectations of our industry and our regulators. Commissioner, we had, until the last year, we had

been under the impression that we were meeting those expectations, that the level of expenditures was consistent with our obligations to the NRC and to the industry.

As I say, I think we did not keep up with the state of the art and we were too isolated from, maybe, from what was going on in the rest of the country. But I'll tell you, personally, since I became chairman, I have gone to ever SALP exit interview, I've gone to every INPO exit so that I could hear, unfiltered, whether there were any concerns that we should be addressing.

The management was making recommendations based on their judgment of what was needed to operate the plant safely. The objective indicators we were getting from outside were consistent with the recommendations and they were operating the plant in a way that was making a significant contribution to the economy of our state.

So if one of those factors had changed, in fact, you know, some people at the NRC have said don't -- we don't want to judge you by your words, we want to judge you by your actions.

CHAIRMAN JACKSON: That's me.

MR. FLANAGAN: Okay.

[Laughter.]

23

24

MR. FLANAGAN: Somebody in the highest authority. And as soon as the ISA report started indicating some issues where there was Commission dissatisfaction, we didn't even wait for the October 7th report to come out. Graham and Bob and Doug had started working in the summer on things that were identified by that team or were in collaboration with that team or SALP identified in the ISA process. And we've done it. We've tried to be very responsive.

What I've outlined here has tried to be very responsive in a very timely way when the NRC said, you know, that they weren't satisfied. But that was not the case up until 1996.

CHAIRMAN JACKSON: Let me see if I can follow on. This is an interesting question that the Commissioner has raised because a question I had for you was, other than the steam generator sleeving, the money for that, you know, had management specifically asked the board for anything above the kind of residual level of financing.

But the more important question really relates to this: Of course, we would like you to be regulatorily responsive but the real question though is, now that the threat has been pulled, there are all these emergent issues that are the subjects of confirmatory action letters and supplements to them. And so it says there were some real issues there that were not discovered.

And so the real question is not so much are you jumping through hoops because we have given attention to you but, rather, you know, your own true belief and understanding as to whether there is something missing in terms of how you discover your own problems and address them. You know, and that would give me more comfort than your coming here and saying that, because, you know, the NRC is giving you all of this attention and "coming down on you" that you are doing this, this, this and this.

MR. FLANAGAN: Right.

CHAIRMAN JACKSON: Because, in the end, you have to run the plant. And so if we have to come along and find things through special teams, then there is some fundamental problem there.

MR. FLANAGAN: I quite agree, Madam Chairman, and I just want to understand the distinction you're drawing.

I just wanted to respond to the Commissioner that there wasn't some irrational, arbitrary and capricious course of action that we were engaged in.

But to get to your point, as I said, this concept of complacency was never universal. And, in fact, besides the cultural assessment team that was already under way, we also have had under way and have just completed this January, for some 18 months they have been working on what's called a learning process which, I think, in the usual . 25

parlance is a corrective action program and one that now --Paul can speak to this better than I can, but any employee of the plant at any level, down to the security guy, can access and put concerns or issues into the -- into a computer and require a response or an analysis. So we are trying to get everybody -- we want to be self-critical, we don't want to be complacent. Both from the top down and from the bottom up we are making fundamental changes.

This learning process, the cultural assessment

from the bottom up, the nuclear committee, the nuclear oversight assistance that we have gotten and bringing in some national experts are all intended to change the corporate culture and assure that there is, going forward, a universe -- not a spotty, not a sporadic but a universal critical attitude of making assessments.

CHAIRMAN JACKSON: Do you believe that there are -- that you have real safety issues that could have and should have been identified before? Or do you believe that you are in a position where you are just having to respond to regulatory pressure?

MR. FLANAGAN: I have to defer to others here who have expertise on safety-related issues to be able to make an assessment. I'll tell you this, I understand -- I understand the concept that I think was articulated at the Wiscasset exit meeting that what's important is having a .

margin of safety.

I think one of the people on your staff used the analogy or the metaphor of a key in a lock and the tumblers, you know, normally will be in such -- so many permutations that you can't get the key in there and turn it and cause a problem. But some things can be all lined up and you can have all the tumblers lined up and the key will operate and you can have a problem.

So that I think it's important that we increase our margins of safety and I understand the importance of the backlog reduction, the work-around reduction and some of the changes, the physical changes that have been proposed as achieving that goal. But as to the specific safety significance of specific actions, I would have to defer to Graham on that.

MR. LEITCH: I believe we have both. I think there have been some issues that have been bona fide safety issues. I think particularly with some of the work we did related to 96-01, Generic Letter 96-01, the logic system testing where we found that a contact in the HPSI circuit had not worked properly, perhaps for a number a years.

That, I think, clearly speaks to a safety issue. There were issues related to the qualification, the environmental qualification of the equipment in the containment where the post-accident flood level would have . 27 submerged some of that instrumentation post accident.

There have been a number of cable separation issues. The linkage between those cable separations and safety is a little less clear, perhaps, in my mind. Nonetheless, the -- what we're talking about here is margin to safety and clearly we have to make those cable separation issues right and get those issues resolved as well, although the apparent impact of those on safety in my mind is somewhat more remote than the other two situations I described.

So I would say we have had both, both real safety issues as well as other things that we need to do to improve our compliance with regulation, improve the margins to safety.

COMMISSIONER McGAFFIGAN: May I follow up just a little longer?

CHAIRMAN JACKSON: All right.

COMMISSIONER McGAFFIGAN: Last year, as this issue of what level of power you could operate at and all these issues started to emerge, was there additional money provided by the board last year above the previous years' level or is this \$38 million increment for '97 the first major increment in funding provided?

MR. FLANAGAN: No. We made some incremental expenditures in 1996, mid way during the year, as I recall.

MR. LEITCH: Yes.

MR. FLANAGAN: As we started dealing with some $\ensuremath{\mathsf{--}}$

MR. LEITCH: There was an additional \$10 million added to the 1996 budget and, as I recall, the budget overran by on the order of \$2 million. Perhaps Mr. Lydon can clarify that situation. So what I am saying is, all told, the expenditures were of the order of \$12 million greater than budgeted in 1996, although those problems occurred somewhat late in the year.

COMMISSIONER McGAFFIGAN: Could I also ask on the governance issue -- is it --

COMMISSIONER DIAZ: Go ahead.

COMMISSIONER McGAFFIGAN: The structure of your board is largely made up of the representatives of the owners, is that correct?

MR. FLANAGAN: Yes.

COMMISSIONER McGAFFIGAN: With only until recently Mr. Feigenbaum, someone with nuclear experience?

MR. FLANAGAN: No, no, there has always been someone with nuclear experience on the board.

COMMISSIONER McGAFFIGAN: But the vast majority of the board is made up of people with primarily, would it be fair to say, economic experience, management, running company experience?

MR. FLANAGAN: Well, there is a regulatory . 29 attorney on the board, Lillian Coco. There are some chief executives on the board, there are some financial officers and there are some other -- some other counsel on the board.

COMMISSIONER McGAFFIGAN: The question really goes to, on these governance changes, which look to me to be very sound, having a nuclear committee, having some real focus on nuclear issues. That is good. Is part of the root cause analysis that perhaps, in the past, I mean, given you are making that change, there wasn't enough sensitivity to nuclear issues or safety issues among the board members? Mr. Frizzle could possibly have received a financial focus when he went before the board more than a safety focus?

MR. FLANAGAN: Commissioner, we, prior to this time, recognizing that we didn't have very many people on the board with direct nuclear experience, we had had a former nuclear oversight committee to try to give us that perspective that was made up entirely of people with nuclear experience. But the -- that was not a very effectual committee and I think one of the reasons for that was it reported to the board as a whole, rather than to a subcommittee with a specific charter, the way this one does, and a specific focus.

They just -- either those particular individuals just looked at the technical issues and thought they were fine or somehow they weren't able to convey -- either didn't . 30 have or weren't able to convey a message of you ought to be looking at some of these underlying design issues or things that hadn't been looked at for 20 years.

So I think this new -- I know -- I think -- I know, this new committee is a lot more robust and I know that the input they gave on preparing the ISA response was

extremely relevant and extremely helpful in making sure this squarely addressed the concerns you had raised.

You have to forgive me, I'm kind of disorganized and I failed to point out at the outset that Mr. Hinson is here to talk about Entergy's perspective and Mike Sellman would be glad to talk about his philosophy for running the plant and Paul Stover, you might be interested in the perspective of the employees in the plant, about how they look at the new management and the cultural changes that we are talking about.

> CHAIRMAN JACKSON: No, I will. We will. Commissioner Diaz?

COMMISSIONER DIAZ: Yes.

Mr. Flanagan, early in your testimony you actually stated and I might be paraphrasing that, although there was a deterioration in overall performance in the plant probably due to root causes as have been identified, you said something like, throughout this period there was always a focus on safety and safety issues.

31

Looking at the question by Chairman Jackson and your response, I would like to ask specifically the question, was there a continuous focus on safety issues? And let me be very specific, okay? We are talking of those structures, systems and components, that are important to safety or any and all of those systems that can prevent or mitigate the consequences of an accident.

Was there a continuing focus on those systems although we have identified two or three issues that certainly have safety significance?

MR. FLANAGAN: Commissioner, that is my belief. We have had a lot of discussion about that in the last couple of months as we have tried to reflect on all of these developments and I am advised that operations always got priority and that operations got the funds and resources it needed in order to do what it felt was necessary to meet the safety requirements for the plant.

But I have to defer to Graham and Doug Whittier, our engineering VP, and Bob Blackmore, who runs the plant who can tell you more authoritatively than I can.

MR. LEITCH: Let me say that in the incident that I referred to earlier, that is the severed wire in the HPSI circuit, when that came to my attention, which was within 45 minutes of the discovery of that situation, I immediately ordered the plant to cold shutdown because I didn't fully . 32

understand the integrity of the rest of the wiring and I felt that the conservative operating decision was to take the plant immediately to cold shutdown and that was what we did. So I think that is a clear indication of our safety perspective.

Another issue that I think is in the same vein is in July, in fact, while the ISA team was on site, we were in the process of doing design review and we found a scenario where in a post-accident situation, the primary component cooling system inside containment might be overpressurized. It lacked thermal relief protection. Once again, the plant was immediately ordered to cold shutdown in that circumstance.

Again, even more recently, when we were dealing with the cable separation issue, in the initial phases of that, the plant was being maintained at hot shutdown and we found an error in the cable separation that would call into question the integrity of our emergency core cooling systems and the plant was there, again, ordered to cold shutdown. It was already in a hot shutdown configuration and it was taken to cold shutdown. That was on December 31.

So I would say that, through this entire period, what I have cited is three incidents, one in July, one in the September time frame and one in the December time frame of 1996 where I believe conservative operating decisions

33

were made with a focus on plant safety.

COMMISSIONER DIAZ: I thank you very much.

I would like to probe a little deeper and ask you in the same sense that Chairman Jackson did, do you agree with the statement of Chairman Flanagan that even amongst this deteriorating performance in a series of areas, the plant overall continued to have focus on safety?

MR. LEITCH: Yes, absolutely. Yes.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: Commissioner Rogers?

COMMISSIONER ROGERS: Just to follow up on that a little bit more, you gave three examples but they are within the last year or so.

Do you have any examples prior to the time in which increased focus on Maine Yankee's operations came about through the NRC where you behaved the same way? It seems to me that's really the heart of the question here.

MR. FLANAGAN: I think Bob Blackmore --

COMMISSIONER ROGERS: Whether you were performing conservatively before this increased attention fell upon you.

MR. FLANAGAN: This is Bob Blackmore, our plant manager.

If you go back to the '91 -- '90-'91 time frame, we actually received commendation from the NRC for our actions on a relatively fast developing steam generator tube rupture that was something that had not been seen in the industry and, in fact, kind of flew in the face of the North Anna curve that had been developed and had, up to that point in time, been believed to be what you could expect from a tube rupture.

So I think that, notwithstanding the events of the recent past, like I say, I was on assignment with INPO immediately prior to the ISA and came back to the plant to serve as the team manager for that inspection and I can tell you that the ISA response team that worked directly for me during that period of time was totally involved with the ISA team in trying to get at some of these issues. We did everything that we could do to try to identify everywhere that there was an issue.

piggy-back on Commissioner Rogers's excellent questions, I would like you to be a little more specific. You say the focus was on operations.

The question is, is the focus on the safety of operations?

MR. BLACKMORE: Yes. As a matter of fact, if you look at even the budgeting process, which has had quite a bit of discussion here, the prioritization system that we had for capital budgets, projects, it was always focused on safety. Any issue that was a regulatory issue or a safety-related type issue always got priority over everything else.

That is really one of the problems that resulted in some of the backlogs that we had because some of the less important projects were deferred.

COMMISSIONER DIAZ: And that contributed to --

MR. BLACKMORE: That contributed to the backlog, $\ensuremath{\mathsf{MR}}$

right.

people -

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: Tell me the order in which

36

COMMISSIONER McGAFFIGAN: Do I get to ask another

question?

CHAIRMAN JACKSON: Well, I don't know.

[Laughter.] COMMISSIONER McGAFFIGAN: This goes to earlier you said you had attended all of the INPO and SALP briefs and

implicit -- and also your own nuclear committee.

Implicit in that is that perhaps INPO and NRC and your own previous nuclear committee may have let the board down a little in providing good information. Was it a goal of the board that you get INPO 1, SALP 1 scores? Was that articulated to Mr. Frizzle and were you hearing that you were -- I honestly don't know what your previous SALP and INPO scores were. Were you getting close to that and was this whole incident a total surprise? What is your perspective about various -- you mentioned three different groups now that could have been scoring you.

MR. FLANAGAN: Right.

Our last SALP score was 1.5 in October of 1995. I think we had two 1's and two 2's as I recall, the 1's being in operation and engineering.

Our expectations were that what we articulated for expectations was that we should try -- we should strive to improve our SALP scores and industry ratings. I don't think we ever set out a specific goal of getting all 1's but that we should be trying to improve. And that one of the things

I thought we should do more of is to have -- as happened with Bob Blackmore, is to have more involvement with INPO circulating people around and getting them out of the state.

But we are also -- we are trying to make that balance that -- between how much to stress those and how much to stress continuing the operation of the plant on an economic basis. There was no question about it. There was no -- we were always conscious of the economic costs. I think that's probably true of anybody trying to run an enterprise, that any kind of enterprise you don't just give a blank check to.

So we were trying to improve our SALP ratings. When we found -- when things were said to be wrong, for example, there was dissatisfaction with security and fire protection in October '95, we tried to take steps to correct those but we tried to do it in an efficient and economic manner.

CHAIRMAN JACKSON: Any other questions? I think we should move along, but if you have a burning question.

COMMISSIONER McGAFFIGAN: It is just to follow up on that, I have been shown charts primarily by people who are in the SALP 1 category that show that safety pays. If you actually do get to SALP 1, you probably are also going to be low cost.

Do you accept that?

38

MR. FLANAGAN: Absolutely. Absolutely. Not only now but always. That is one of the reasons that we thought, if we learn more from the industry and strove to improve our scores that we would be better off. That's always been the case -- or, I don't want to say always; for several years that's been the case.

CHAIRMAN JACKSON: Who else are you planning for us to hear from?

MR. FLANAGAN: What I would like to do is have Don Heintz speak about Entergy's contemplated role and to introduce you at least to Mike Sellman, our president-elect. And I do think that you would be interested in the views of Paul Stover, the head of our union. If time permits, Graham can talk about some of the physical changes, the fact that we are ahead of schedule on meeting those ISA physical change and backlog issues, if that would be of interest.

CHAIRMAN JACKSON: And that's the order in which you would like to go?

MR. FLANAGAN: Yes.

CHAIRMAN JACKSON: Okay.

MR. HEINTZ: I will try to be short.

thought I was trying to take over the rest of Entergy. [Laughter.]

CHAIRMAN JACKSON: Let the record show that you corrected that.

MR. HEINTZ: Although Entergy has not done an extensive evaluation of Maine Yankee at least up to the present time, so I really can't speak to any specific challenges facing the plant, but I have had extensive discussions with Dave Flanagan and other members of the management team, and I do believe that there is a common vision of how Maine Yankee does need to be operated in the future. That is to be operated at the highest standards of the industry, so we feel that we are aligned on how that plant should be operated and believe that we would get the support from the Maine Yankee Board to be a successful operation.

I would like to also say that we at Entergy are fully committed to support Maine Yankee, and I believe there's a number of things that we can bring to Maine Yankee.

We do have the bench strength and the management

depth to provide people that have been very successful in the nuclear business. These are people like Mike Sellman and Mike Meisner, who is with us today, and Mike will be speaking shortly.

The other thing is I think we really do have two core competencies in Entergy operations that I think are particularly important to Maine Yankee, the plant. Those two core competencies are I think we are a recognized leader in the development of management strength, not only providing management at the Entergy nuclear plants but we have been heavily recruited and we have a number of the Chief Nuclear Officers at the other plants in the industry and other senior management and they have been successful, so I think we have done a good job.

We do bring some people in from outside our organization but a very high percentage of them have been developed and groomed within the Entergy organization.

I think the other core competency that is extremely important to the situation that we have at Maine Yankee is we have been successful in turning around operations at nuclear plants, both the boiling water reactor and pressurized water reactor.

In the early days of EOI, shortly after it was set up, we took over the Arkansas Nuclear I plant that had just received a diagnostic evaluation and the results were very . 41 concerning to Entergy, and we put together an extensive, comprehensive three-year improvement program and today that plant does operate we believe at some of the highest standards in the industry and has been selected by a nationally-known magazine as the most improved nuclear plant in the country.

The second case was as a result of the merger with Gulf States Utility at the end of 1993 we did take over the operation of the River Bend Nuclear Plant, again a plant that had struggled in the regulatory area and a plant that did not have very good operational performance capacity was quite low.

Again using some of the very same tools that we used at ANO we put together a comprehensive improvement program where we tried to identify everything that was needed, all the way from the management issues to processes improvement to improving the material condition of the plant, such that today River Bend is operating very well with minimal shutdowns, well planned outages, and so I think we have shown that we can take a plant that is struggling both in the regulatory area and in operational performance and turn around that in a relatively short period of time through a comprehensive assessment of the plant and a comprehensive improvement program.

I think both of those core competencies that we . $$42\ensuremath{2}$$ think Entergy has I think are both very applicable to the

situation as I understand it that we have at Maine Yankee.

Also, in the case of Mike Sellman, who is the President-Elect at Maine Yankee, he has been involved in a very critical role in both of those turn-arounds. He was the General Manager at Arkansas Nuclear I through part of that turn-around, and was one of the first people that we put at River Bend in the General Manager position when we took over the operational responsibilities for River Bend, and more recently he had been moved to Waterford because there was some culture changes that we wanted to bring around at the Waterford plant, so I think we are bringing to the Maine Yankee organization a very experienced person that has experience in turning around the performance of nuclear plants not only in the operational performance but in the regulatory performance.

With that, I would like to turn it over to Mike Sellman, who is President-Elect at Maine Yankee.

MR. SELLMAN: Thanks, John. Good morning

CHAIRMAN JACKSON: Good morning.

MR. SELLMAN: I'll be brief also.

As Don said, we have not had a chance to go to Maine Yankee and do a detailed evaluation yet. I have met with all the employees. I have talked to the management team. I am looking forward to arriving on site Monday . 43

full-time.

There's a few reasons I'd just like to highlight that I think Entergy can be successful at Maine Yankee and can add value. Don mentioned experience and we do have people available that can come, that can help who have been through turn-around situations at our ANO and River Bend sites.

I want to introduce Mike Meisner now because Mike has just taken a trip up to Maine and he's agreed to join me there on Monday.

Mike, do you want to stand up?

Mike has played a key role through the years with Entergy, first at -- well, he worked at Grand Gulf for a number of years -- in charge of licensing -- and now he is in charge of licensing for all of Entergy.

On Monday he will be in charge of licensing for Maine Yankee. This is a position that has not existed in the past at Maine Yankee and we think it is absolutely critical.

A third strength that we think Entergy will bring is that we have proven processes in place and we can directly transpose those to Maine Yankee.

Fourth, we are going to try to do a lot of mixing of people. We talked earlier, David mentioned earlier some insularity, and Entergy is a fairly large organization. We . 44

want to have complete involvement of people Maine Yankee in a number of support groups that currently exist at Entergy.

We have peer groups where, for example, all the Operations Managers get together on a quarterly basis to talk about issues. Maine Yankee will be a part of that.

We have assessments where we bring in people from all our plants to assess one plant, and Maine Yankee will be part of that. I think that will help.

Let me just mention briefly philosophy. There's certain key principles that I found to be true at all the plants that I have been at, and I began with Prairie Island and then through ANO, River Bend, and Waterford.

I keep my philosophy in a little wallet-sized card. I'll be happy to give you a copy of this, but just to highlight a few points, the first key principle is ownership.

We need to make sure that everybody at the site owns the plant just as if it was their own home.

The second one is improving staff competence. We do that with a very effective, try to install a very effective training program, and in addition make sure that we have good supervision and we give good performance appraisals to people. The third and one that I think is one I have always had a lot of focus on is maintaining the equipment in . $$45\!$

absolutely top-notch working order.

There's three parts to that. One is that you need to have a very low corrective maintenance backlog so that you can be proactive in addressing equipment issues and you do that through the second part, which is a very good preventive and predictive maintenance program, and a third one is equipment obsolescence.

We all know that when you build a plant in the early '70s after awhile it becomes hard to find parts for certain components and we need to have an ongoing program where we replace equipment that becomes obsolete.

Those are the things that have been tried and true, proven true at the Entergy sites and we will continue those at Maine Yankee.

Another principle is to run safe, effective, timely refueling outages. As you know, you can get into some trouble in outages if you don't carefully preplan them and look at the risks associated with what you are doing.

Fifth principle is to write technically correct procedures, human factor procedures and make sure people follow them. It isn't uncommon for plants to have very cumbersome procedures. In fact, you often develop lengthy procedures because you are building in procedural work-arounds, procedural solutions to problems rather than physical solutions. That is what we will try to avoid.

Sixth principle -- operate conservatively. Don't be afraid to shut the plant down. Put the operators first. They are the customer. We need to make sure that operators don't have to work around problems. If they have got problems we have got to eliminate the problems, make it easier for them to operate the plant.

Seventh and I would say most important, be self-critical and being self-critical means that we'll find our own problems. Once we find the problem we will have to get to the root cause, and aggressively pursue solutions that are in the broadest sense, and that's what we intend to do.

When we arrive on site on Monday we are going to begin to develop a comprehensive improvement plan. That plan will build on the Maine Yankee response to the ISA and on the business plan, which we think are pretty good documents, but we are going to bring in a number of people and do our own assessment and couple what we find with those two documents and come up with a comprehensive improvement plan.

We will prioritize the efforts in that comprehensive improvement plan. We'll establish key milestones. We'll develop a reporting process so we can brief you and Maine Yankee on progress and make sure we are successful.

47

Finally, and probably most importantly, we'll assess the effectiveness as we go, and if we need to check and adjust, we'll do that.

In conclusion, I would just like to say that we intend to apply the same principles at Maine Yankee that we have applied and have proven successful at the four Entergy sites. Thank you.

CHAIRMAN JACKSON: Thank you. Let me ask you this

quick question.

If I look at your timeless principles, have you had the opportunity to make an assessment relative to Maine Yankee on where they stand in each of these areas?

MR. SELLMAN: All I know right now is what I have read. It probably wouldn't be fair. I can answer that question a lot better a month from now, if you can wait that long.

CHAIRMAN JACKSON: Okay. We'll ask you a month from now.

[Laughter.]

 $$\operatorname{MR.\ FLANAGAN}$$ During that month I would like to introduced

[Laughter.]

MR. FLANAGAN: -- Paul Stover, who is President of Local 497, and we thought it might be helpful to have the perspective of a worker, and Paul, step forward. We thought . 48

it might be a good idea.

MR. STOVER: As noted, I am part of the Utility Workers Union and we have a Local 497 at the facility.

I have held the position of President for the past 12 years. We represent operators, maintenance workers, and technicians within the group.

As President, as Dave had noted, I asked for the opportunity to come forth to address two issues and very briefly.

One of the issues at Maine Yankee is the permanent staff is highly trained, educated and dedicated to the facility. I have spent the last 20 years working at the facility myself as a Radiation Controls Technician and I can say that we are committed both personally and as a group to the safety of the facility.

On a personal note, I chose to live in the Wiscasset area, raise a family, and build a home all within two and a half miles of the plant. I consider Maine Yankee extremely safe.

Number two, and in conclusion -- I don't want to take away from Graham's thunder -- the workers at our facility and within our bargaining unit look to the relationship with Entergy as vital for the facility, as well as fostering a new partnership between the union and management.

4

We can build a team and bring Maine Yankee back to the position that he once held.

With that said, I'll turn it over to Graham Leitch, who is the Vice President, Operations, at Maine Yankee.

> CHAIRMAN JACKSON: Before you do that --MR. STOVER: I knew you were going to say that --[Laughter.]

CHAIRMAN JACKSON: I am becoming too readable. I am not inscrutable enough. I'll have to work on that.

Let me ask you this question. Why do you feel the relationship with Entergy is vital? What is it going to do for you?

You said that the permanent staff is highly trained with a dedicated safety focus. What is it that you need from Entergy and what is it that Entergy is going to do for you that wasn't already going on?

MR. STOVER: It was already going on with the former management staff. It's vital in the cause that our union, which is 140 members, if Maine Yankee fails, we fail.

If Maine Yankee shuts down, we shut down. We have a vested interest for all the goals, and that is what I meant by vitally important that we foster a good partnership.

CHAIRMAN JACKSON: And so you feel you have to get through this process successfully?

50

MR. STOVER: We have to learn from it, not only get through it, but learn from it.

CHAIRMAN JACKSON: Let me ask you this one other question. Has Management specifically asked plant staff to bring forward any and all potential safety concerns?

MR. STOVER: Through my office we have -- and the union hierarchy -- we have a system where employees can and often do bring forth safety concerns, and while I have been President I have had the opportunity to work with five plant managers. Each one has always taken any issue that I brought forward with a keen respect and putting it higher on their priorities.

Now, although I am going to be put out of business because of the learning process, employees can go to a terminal and punch in a problem or an issue and get resolution that way.

CHAIRMAN JACKSON: Okay.

MR. STOVER: It is all-encompassing. COMMISSIONER ROGERS: May I ask a question? CHAIRMAN JACKSON: Commissioner?

COMMISSIONER ROGERS: Yes. I wonder if you could just comment on your feelings about, as a radiation protection technician, how the level of radiation exposure at the plant fared for the average worker?

MR. STOVER: Well, through the years in the . 51 implementation of the ALARA department our dose per employee has drastically been reduced.

The emphasis now on ALARA is extremely important and all the workers take that to heart, so I think we are in a downward trend. The thresholds have been lowered and it is down to the working guy on the floor.

COMMISSIONER ROGERS: Have you looked at other comparable plants to see where you stand?

MR. STOVER: I have not, no.

CHAIRMAN JACKSON: Commissioner Dicus, do you have any questions?

COMMISSIONER DICUS: No.

CHAIRMAN JACKSON: Commissioner Diaz?

COMMISSIONER DIAZ: Yes. Somebody said ask the question three times and be ready to be surprised.

Do you believe that throughout this last period and even before union members or all of the members of the Maine Yankee workers had safety focus that was adequate to provide protection to the health and safety?

MR. STOVER: Commissioner Rogers asked a similar question on operator safety and I can address that in a very few sentences.

Within our group we have the operations and the ROs, the reactor operators, with a license.

Prior to standing watch they are all required to $\ensuremath{52}$

go and have a personal interview with Graham Leitch to check on philosophies and how conservative they will be to operate the facility.

A couple of them came to me and asked me about this. It is a practice that gives Graham the warm and fuzzy feeling that the plant itself is going to be run in a very conservative manner and that safety is paramount above everything else, so that is built into our philosophy.

COMMISSIONER DIAZ: So you agree that this

philosophy is there?

MR. STOVER: It is there. Yes. COMMISSIONER DIAZ: Thank you, sir. CHAIRMAN JACKSON: Commissioner McGaffigan? COMMISSIONER McGAFFIGAN: No.

CHAIRMAN JACKSON: Okay.

MR. FLANAGAN: Our final presenter is Graham Leitch, who will bring you up to date on the actual physical and programmatic changes that we have already undertaken in the ISA.

MR. LEITCH: Madam Chairman, Commissioners, I will attempt to be brief as well.

The ISA report was issued on October 7 and our response was submitted on December 10. I know that you are more interested in our actions than in our words and how we deliver on our commitments.

53

Since that time and, in fact, well before the time of our response, even while the ISA team was still on site, we were beginning to address a number of the issues that were raised and we have been aggressive and vigorous in responding to those findings since the time the ISA team was there. That response, that vigorous response, continues even until today.

We have been able to make substantial progress on most issues. We were able to accelerate some issues due to the current outage situation. During the outage, the plant is in a configuration that certain issues are able to be worked now whereas our previous plan was not to work those issues until the refueling outage in the fall of this year. However, with the plant down now and the head off the reactor, that gives us the opportunity to work certain ISA issues that were not planned until later in the year.

And I can report today that 95 of 373 tasks are complete. If I can call your attention to the pie chart, you will see that in addition to those 95 that are complete, there are 263 items that are on schedule and only five at this point that are behind schedule.

I would like to discuss with you on the next viewgraph --

CHAIRMAN JACKSON: Please, no, you first. COMMISSIONER DICUS: Back to the pie chart?

54

MR. LEITCH: Yes.

COMMISSIONER DICUS: Of the issues and the tasks that you have been addressing, could you characterize them in terms of their difficulty to complete or their safety significance and so forth? Basically, what I am going toward, the ones that have been completed, were they the easier ones to do, were they the less significant ones to do? And of these that are behind, are they particularly safety significant?

MR. LEITCH: We have -- certainly there are a number in the done column, the complete column, that are relatively easy things to do. But I would also say that there are a number of issues that are completed that are very difficult issues to do.

An example of one of those is an issue that came up during the ISA concerning the performance of the HPSI pump at run out. It is very difficult to confirm whether that was or was not problematic, particularly with the head on the reactor.

This current outage gives us an opportunity to confirm that situation and we have tested the HPSI and found it to be acceptable. That was a considerable amount of -considerable amount of work. It required a very detailed procedure, required perhaps two days of critical path time to implement that procedure. So that was a very significant . 55 piece of work.

I know another issue that is particularly of significance is the reliability of what we call P.25.B, the auxiliary steam-driven feed pump and we have spent a great deal of time attempting to improve the reliability on that, at this outage installing a new controller, making other modifications to that piece of equipment which we believe will significantly improve the reliability of that component.

The proof of that issue is still in the balance. We have to operate the plant and continue to take data on that to be sure that the expected reliability improvements have actually been achieved. So I would say there are some in that grouping that are very, very significant issues. We have not just been dealing with the easy ones, although frankly there are some easy ones in there too. But there are also some very difficult ones that we have been dealing with in that situation.

COMMISSIONER DICUS: What about the five that are behind schedule?

MR. LEITCH: The five that are behind schedule are largely due to prioritization of work associated with the cable separation. Right at the moment, we are saturated, if you will, with electrical work. We have been doing a great deal of work on 96-01 logic system testing, which is . 56

intensive electrical work. We have also been doing a great deal of work on cable separation. Again, intensive electrical work. We are going to relocate some devices inside containment, switches, instruments, again electrical work.

So we are behind on some of our electrical work. That is behind schedule. Those are not actually late at this point and we believe the schedule is still recoverable but we have to focus on that as soon as we get out of the current cable separation issues.

CHAIRMAN JACKSON: This is actually related. The fact that you have completed 26 percent of the issues, does that imply then that you have completely defined the scope and depth of your response to each of the ISAT findings and is there concurrence between you and the NRC staff on that?

MR. LEITCH: No. I think we have not, we have not reached that level of concurrence. I think we would apply sort of a weighting factor. In other words, this represents 26 percent of the items that are done. If your question related to have we assigned a weight to those and is that a weighted --

CHAIRMAN JACKSON: No, no. In terms of what the scope and depth of what the fix is and is there concurrence between --

MR. LEITCH: We have not, in all cases, we have \$57 not had detailed discussions with the NRC staff in that

regard. In a few of these cases, we have. For example, the

HPSI issue that I have mentioned before, that testing was done under the direct observation of an NRC inspector so the NRC staff is well aware of exactly what was done in that regard.

CHAIRMAN JACKSON: I guess what I am really trying to get at is with the things that you have completed, is there agreement that they are complete and in terms of what you are planning to do on those that are not completed, is there agreement that what your proposed response is will resolve the issue?

MR. LEITCH: No, we have not resolved those issues on a line-by-line basis with the staff at this point. CHAIRMAN JACKSON: Okay, so perhaps the staff is

going to speak to that when they talk to us.

Have you assessed the impact of the ISAT findings on the remainder of the plant? More specifically, what implications do you draw from the report as to the adequacy of the structures, systems and components that were not inspected as part of the ISAT?

MR. LEITCH: That, I think, goes to a very large extent to our response which we plan to submit in a day or two to the 5054(f) letter. In that response, we commit to review, to do basically a design basis reconstitution of

safety-related systems which have not recently had a design basis reconstitution and we have committed in that 5054(f) letter to complete that design basis reconstitution of all safety systems by the last quarter of 1998.

The -- I believe in order to fully assess the impacts, the type of things that we found in ISA on the rest of the system, that work needs to be completed. Let me say, however, that we are also doing a margins review. That is one of the issues that was pointed out in the ISA is that at a number of places in the plant designs -- in the plant design, our margin was quite small.

As you know, we are operating at 2440 megawatts thermal and we have committed in the ISA response that, before we seek permission to exceed 2440 megawatts thermal, we will have completed our margin review to confirm that other systems have adequate margin.

CHAIRMAN JACKSON: So you will also then be addressing the accessibility and retrievability of your design basis data for those safety-related systems as part of the design basis constitution?

MR. LEITCH: Yes. Yes.

CHAIRMAN JACKSON: Let me ask you this, has your quality organization or, for example, your independent assessment of the environmental qualification area raised any new issues beyond those that have already been spoken . 59

to?

MR. LEITCH: The independent assessment of the environmental qualification?

CHAIRMAN JACKSON: Right, or just in terms of any other assessments or self-assessments or through your QA organization or whatever.

MR. LEITCH: It appears, if we are looking for some common threads here, it appears to me at least that there is a common thread that lies through modifications that were done in the early 1980s. It is not an absolute correlation but it seems to me that we have a great deal of difficulty and many of our problems have been discovered in work related to those modifications that were done in the early 1980s or in the power upgrade immediately following that time frame.

I believe that the post-TMI period when there were a number of modifications that were installed in the plant appeared to have stressed the organization's ability both to design and to install modifications in a high-quality manner. So it looks to me as though we need to take a hard look and, in fact, we are taking a very hard, in depth look at modifications and, in fact, in the issue of cable separation, for example, we are finding that a very high percentage of the cable separation issues are associated with those modifications.

60

CHAIRMAN JACKSON: Let me ask you two other quick questions.

You mentioned that you had completed 95 of 373 issues but the pie chart shows 363. Are there 10 missing ones or is that just a mislabeling?

MR. LEITCH: I misspoke.

CHAIRMAN JACKSON: So is it 363 or 373?

MR. LEITCH: It's 363.

CHAIRMAN JACKSON: But, of more import perhaps, the ISAT report identified that you were tracking 3,200 open issues at that time using a large number of different tracking systems. So the question is from me to you is, how have you gotten your hands around those 3,200? Have you prioritized them in terms of safety and what assurance or decisionmaking can you provide or have you been able to do as to a judgment in terms of whether each issue that's been identified should be resolved prior to restart from your current outage?

MR. LEITCH: We have looked at those issues and the safety-related issues are being loaded into the learning bank. That is, the new learning process. We have taken --what I am saying is the learning process started on January 6 and is going forward with new issues. On the old issues, we are loading those issues into the learning process and, as we do that, we are reviewing the prioritization of those .

issues. That work is not yet complete at this time. CHAIRMAN JACKSON: Commissioner? COMMISSIONER DIAZ: A quick question.

In this backlog reduction program, you stated that the level of backlogs will be reduced to minimal level, you think, to operating cycles. Do you have a specific quantitative target that addresses that?

MR. LEITCH: We are in discussions with INPO in that regard. The issue is that different people count backlogs in different ways. We are trying to be sure that our performance indicators are consistent with industry tracking systems and working to establish a goal, a specific numeric goal that will be reflective of industry practice.

We have a work order system that in some cases has several different work orders for one activity. For example, one work order might be to install scaffolding, another to remove insulation and a third to make a repair. We're not sure that that practice is entirely consistent with industry practice and we are verifying that situation to be sure that we are consistent and then we will establish goals in accordance with the best plants in the industry.

COMMISSIONER DIAZ: I just want to make sure that the word "minimal," you have a specific target area?

MR. LEITCH: Yes, yes. We do plan to establish a specific numerical goal.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: When do you think you will have

your hands totally around all of this?

MR. LEITCH: I'm not --

CHAIRMAN JACKSON: I'm thinking of, you know,

the -- when you will have --

MR. LEITCH: The numerical goal for the

maintenance backlog?

CHAIRMAN JACKSON: That's right, and have the total assessment of these 3,200 open issues done.

MR. LEITCH: We -- I would say the maintenance item is going to be sooner than the total assessment of the 3,200 issues. I would expect the maintenance item, and I am not familiar with the specific of the schedule that we have for that but I believe that it would be within about two months that work could be done. The 3,200 items, I don't have a specific schedule. That activity has not been specifically scheduled.

CHAIRMAN JACKSON: Let me ask you about a specific issue having to do with your off-site power supply capability.

MR. LEITCH: Yes.

CHAIRMAN JACKSON: Last November, you experienced a complete loss of off-site power.

MR. LEITCH: Yes.

63

CHAIRMAN JACKSON: And my understanding is that the ISAT team had previously questioned whether the off-site power system satisfied the facility design and licensing basis. Now, I know that the NRC staff has this issue under review and has corresponded with you. And I note with some viewgraphs that you didn't use that you had indicated that you expect that the design change -- the design change relative to that to be completed before startup.

There is also an issue having to do with the tech specs.

MR. LEITCH: Yes.

CHAIRMAN JACKSON: And you also intend to have the tech spec change done and approved.

MR. LEITCH: That's correct.

The tech spec change will require two operable lines and prescribe allowable out-of-service time with one line out of service and allowable out-of-service time with the second line out of service. The first time, I believe, is 72 hours and the second time is 24 hours.

We are preparing that tech spec change this week and that tech spec change should be submitted within a week. That is, the application for that tech spec change. There is a modification in the plant to facilitate the operation of our feed pumps in that configuration and that modification will be installed during the current outage. . 64

Although there is not a direct correlation between that and the tech spec, but it is an operating preference issue that we want to install a modification on the autostart of the feed pumps.

CHAIRMAN JACKSON: So this was not an issue though that had been previously identified. Will this then be the kind of thing, with your looking at your -- dealing with your design basis issues, that is likely to be uncovered?

MR. LEITCH: It is my understanding that, speaking quite frankly, that that is an issue that has previously been identified and, frankly, for years has been somewhat of a bone of contention between the NRC staff and Maine Yankee.

CHAIRMAN JACKSON: Until you had the loss of

off-site power event?

MR. LEITCH: That certainly heightened -- that

certainly heightened interest in it.

CHAIRMAN JACKSON: Okay.

Commissioner?

COMMISSIONER McGAFFIGAN: I'd like to ask one question. Really, this might bring Mr. Sellman back into the conversation. But he introduced a colleague who is

going to be in charge of licensing as of next week.

MR. LEITCH: Yes.

CHAIRMAN JACKSON: And he said that was a function that you didn't previously have or at least a position you .

didn't previously have.

MR. LEITCH: Mr. Meisner is going to be in charge of licensing.

COMMISSIONER McGAFFIGAN: Mr. Meisner, right. He introduced Mr. Meisner, who will be in charge of licensing.

How was that function carried out in the absence of a person like Mr. Meisner in the current organization and was that the part of the problem that emerged in the last 18 months?

MR. LEITCH: Doug Whittier is our vice president of licensing and engineering and what we are doing here by this move is separating out that responsibility so that there would be both a vice president of licensing and a separate individual as vice president of engineering.

MR. FLANAGAN: Commissioner, that was one of the first steps that the board itself recommended taking in response to the ISA report. We decided in our first reaction to the ISA report to establish a separate licensing position at a higher level in the organization so that licensing and compliance would be a full-time occupation for an officer level individual.

COMMISSIONER McGAFFIGAN: So that was something you were planning to do irrespective of Entergy --MR. FLANAGAN: That's right. But in fact we had

interviewed a number of candidates, very good candidates.

But hopefully the board will support the election of Mr. Meisner and we can get started very quickly. We are going to have a board meeting on February 10 and I am optimistic of his chances.

CHAIRMAN JACKSON: You will have embarrassed him if the board doesn't.

[Laughter.]

CHAIRMAN JACKSON: Do you have a system engineering group?

MR. LEITCH: We do not now. In fact, that is one of the actions that we are embarking upon and in fact I referred to that at the bottom of my last slide. We do, at the moment, we have appointed someone in charge of that system engineer group and we are just in the early stages of putting together a system engineering group.

One of the things that we have requested in that regard is a special assist visit from INPO because we want to get their insights with regard to how a system engineering group should be organized, exactly what their responsibilities should be. There have been some people who have done system engineering concepts rather poorly. There have also been some that have done it very well and we want to be sure that we get the benefit of all of that experience and we are looking to INPO as well as some other folks that are familiar with the system engineering concept.

67

We have a plan in mind as to how we think it should be organized but we want to test that plan out with some other industry experts before we proceed to actually implement that. But that is part of our commitment and we are moving forward with that process.

> CHAIRMAN JACKSON: Any other questions? [No response.]

MR. FLANAGAN: If I could just sum up, Madam Chairman, I would like to make five points.

The first is that we have already taken a number of significant steps, both organizationally, financially, in terms of management, in terms of physical changes to address the issues that have been identified and we look forward to the opportunity to meet and collaborate with the regional staff on how well we have done in squarely meeting the concerns on that.

The second point I would like to make is we are going to be emphasizing and concentrating on teamwork now with Entergy. We have a challenge here to integrate their culture, their processes, their skills with those that already exist at the plant and that is something that I look forward to working with Don and Mike and Jerry Yelverton and other people at Entergy on. I am sure we can do it.

In fact, one of the reasons we got together with Entergy was we saw some commonality of values and visions.

The third is, and I want to emphasize this, Madam Chairman, we are trying all the things we can think of to ensure the institution of a long-term self-critical culture at Maine Yankee. That is why we brought in a new board member, that's why we brought in an oversight committee, that's why we brought in a whole new management team from another part of the country. That's why we got the team -the learning process and why we are trying to make the cultural changes that we have identified. We are very, very serious about that.

I would also like to point out that we continue to put an emphasis on conservative decisionmaking and I think Graham and Bob have indicated some specific instances of that.

Finally, I want to assure you that we are not jumping through hoops. We are focusing on results here. The mandate of that nuclear committee of the board really is to track progress on these various issues and to verify that the changes we made aren't a sham but result in the -produce the results that are wanted by both the NRC and by ourselves.

So I think that, in summary, we are doing all we can think of in what we believe is a very comprehensive program to respond to the issues that have been identified and make the changes that are necessary. I want to thank

you for the time and consideration you have given us here this morning.

CHAIRMAN JACKSON: Well, thank you for your presentation. It has been quite detailed. I am not going to lecture you about anything. I think that -- and I am not going to talk about whether you have three safety-related issues or safety-significant issues or 300. The point really has to do with your own ability to look outside, to benchmark, to not be insular, to identify your own problems, understand their safety significance and to correct them with the spirit of safety first in mind.

And in the end, results are what always matters. I told my staff I wouldn't use my hackneyed phrase but I will use it anyway, which is performance is as performance does. So we will be looking forward to seeing your progress and results.

MR. FLANAGAN: Thank you.

CHAIRMAN JACKSON: Thank you.

I think we will now hear from the NRC staff. At the rate we are going, we will be here all day.

Mr. Thompson.

MR. THOMPSON: Chairman Jackson, Commissioners, it is always nice to fill a warm seat.

[Laughter.]

MR. THOMPSON: At the table with me this

70

morning --

CHAIRMAN JACKSON: As long as it's not a hot seat. MR. THOMPSON: That's right. I was worried about

that myself.

COMMISSIONER DIAZ: But it might get hot.

[Laughter.]

MR. THOMPSON: I'm sure it will.

With me today, slide one shows you the NRC executives who are here to respond to you.

For those of you who are here in the audience who may not know them, Ed Jordan, who is the Deputy EDO for regulatory effectiveness, also led the ISAT team which was the subject of quite a bit of the discussion. To my right is Frank Miraglia who is the acting director of NRR and Hub Miller who is the regional administrator for Region I and, as you know. Region I has the lead responsibility for oversight of the restart activities along with the specific support from NRR.

I would also like to take this opportunity to note that there are two representatives from the state of Maine, Mr. Wiley and Mr. Vanags, and they are here today.

CHAIRMAN JACKSON: Please. I will invite you to the table.

MR. THOMPSON: Now joining us at the table.

They had, as far as I know, no specific prepared 71

remarks but they certainly have been a part of our oversight and observing what we have done before.

CHAIRMAN JACKSON: Welcome.

MR. THOMPSON: As you have heard, we really have focused our activities on a number of things. The Maine Yankee response to the ISAT report findings and, of course, some of the design issues that have arisen since that. And, of course, we have a process in place to look at those issues, evaluate the safety significance of them as they are found and, in essence, we have identified a number of specific issues which we believe we will require to be fixed prior to restart. Those will be addressed, as well as the process that we have in place to look at all the other issues. As we said, there were many issues that are ongoing today and we will address those.

So, with those opening remarks, I would like to turn it over to Frank Miraglia who will discuss some of the NRR and headquarters perspectives.

MR. MIRAGLIA: Thank you, Hugh.

Good morning, Madam Chairman, Commissioners. May I have slide three?

This is a brief background and I think we have covered much of it in the conversations up to this point. As a point of departure, December of '95, an allegation regarding code and use of codes for small break LOCA

72

analysis was brought forth to the Commission and, as a result of that, the agency -- Commission issued an order on the 3rd of January that restricted power operations to 2440 megawatt thermal.

At that time, the staff also initiated a lessons learned effort internal. That report will be coming to the Commission in the near future and an action plan to respond to those activities and the generic lessons that come out of the ISA finding and action plan is due to the EDO at the end of February and would be provided to the Commission shortly thereafter.

CHAIRMAN JACKSON: Let me make sure I understand. The staff initiated lessons learned efforts. Is this the broad lessons learned from both Millstone and Maine Yankee?

MR. MIRAGLIA: No, this was a specific Maine Yankee look and we have looked at that in concert with the Millstone to incorporate some of the features that are common.

CHAIRMAN JACKSON: Okay. Before you leave that graph, let me just ask you, you talk about the January 3 order and it provides a basis for operation at 2440 megawatts thermal until the reanalyses have been performed for potential operation at 2700. What is the status of the review necessary for increasing from 2440 and specifically then will this review be done in conjunction with the net

positive suction head issues?

MR. MIRAGLIA: There are several aspects. In terms of the current restart, we would be at 2440 so some of the issues that need to be readdressed for 2440 will be addressed prior to restart. There are long-term activities for 2700 megawatt operation that we are dialoging with the utility and, as you heard from Mr. Leitch, they are not even going to even ask for that until much later on.

There are ongoing activities with Maine Yankee in terms of some of the small break LOCA analysis and developing an approved model. The MPSH issue, we are still waiting for submittals and dialogue on that so it is something that is planned activity but it stands before us, in front of us and is further down the pike.

CHAIRMAN JACKSON: So the MPSH issues, the resolution of them relate to the 2700 megawatt thermal not to the 2440?

MR. MIRAGLIA: In the long term, yes. The complicating factor is that in terms of the ISA there were some issues raised by the ISA, some questions whether there was sufficient margin MPSH for 2440. Those were examined at the time, those issues were -- and we will get into those a little more in detail. Those issues were raised to the region and headquarters staff and were dealt with in terms of using our existing processes did those concerns raise

operability issues that had to be dealt with. CHAIRMAN JACKSON: For 2440.

MR. MIRAGLIA: At the time of its identification that had to be resolved.

CHAIRMAN JACKSON: Now, someone here, Mr. Miller,

74

you are going to speak to that at some point?

MR. MILLER: Yes, ma'am.

CHAIRMAN JACKSON: Let me ask you another

question. This order, does it relate to resolution of the TMI action items?

MR. MIRAGLIA: In terms of the -- yes, the 2-K-30
and 31.

CHAIRMAN JACKSON: Right, the 2-K-30 and 330 and 331.

MR. MIRAGLIA: The small break LOCA analysis would be once approved and then once applied in the right kind of manner for Maine Yankee would address those issues for 2700 megawatt.

CHAIRMAN JACKSON: So those relate again to operation at 2700 megawatts not 2440 megawatts?

MR. MIRAGLIA: And the order dealt with those issues in the context of 2400 and the basis for the order addresses those.

CHAIRMAN JACKSON: So let me make sure I understand what you're telling us here. I don't understand . $$75\!$

Will they be resolved or not before the operation of the plant at 2440 or are they the basis of operation -they have to be resolved for operation at 2700?

it either.

MR. MIRAGLIA: Those two TMI issues had to do with small break LOCA analysis and those LOCA analyses were needed to confirm that the existing analysis of record for the ECCS was bounded by large break LOCA analysis.

In issuing the order last January, we went back to a code that goes back to the '70s, I believe, 1977. And that code was sufficient. And based upon our experience with the other codes, the small break LOCA was not bound and LOCA analysis was sufficient to justify operation in terms of 5046. so the resolution of the small break LOCA analysis was not needed to do that; it's encompassed within the other code. We had sufficient information.

CHAIRMAN JACKSON: The one thing we are trying to get to is, this bounding, does it cover operation at 2440?

MR. MIRAGLIA: Yes.

CHAIRMAN JACKSON: All right. But it does not bound for --

MR. MIRAGLIA: In order to go to 2700, additional analysis would have to be done to extend that to 2700.

CHAIRMAN JACKSON: Did you have another question? [No response.]

76

MR. MIRAGLIA: With respect to the next slide, the independent safety assessment inspection was an outgrowth of some of the concerns and the Chairman instituted that inspection last spring and it has been the subject of most of the discussion here this morning.

There are a number of ongoing staff actions since the ISA was conducted. The current status of the plant, it is in a shutdown condition and a number of restart issues have been identified. Those issues are either flowing from concerns raised by the ISI or from further actions taken by the utility or by the NRC.

The Generic Issue 96-01 issue was an issue that came from the ISI -- ISA inspection and that followup and additional testing has raised additional concerns and as the utility has indicated to you this morning, as a result of some of that, additional cable separation issues have been identified and those were the subject of a confirmatory action letter last December.

Since that time, two other issues have been identified, the off-site power and the circ lines were identified and it was a concern expressed by the ISA, as the Chairman indicated toward the end of the presentation by the licensee, as a result of those concerns the agency staff and the licensee were exchanging information. About that time, there was a loss of off-site power event. In further . 77

dialogue and the information received, the staff has concluded that they did not meet the commitments in the FSAR and the design basis and changes had to be made and the tech specs had to be modified as appropriate. There has been dialogue with the utility on that issue and they have indicated to the staff that they will take those kinds of actions and, as you heard from Mr. Leitch, the tech spec amendment will be coming in in a week or so.

CHAIRMAN JACKSON: Let me ask you a couple questions on it and I am not trying to put you on the hot seat but I think we want to try to understand a couple of things. These issues related to off-site power specifically were issues out of the ISAT and now my understanding is that they are restart issues today. Does that put us in the position of being criticized for not having shut them down with respect to those issues or, put another way, how did we arrive at the safety significance of these issues relative to now their becoming restart issues?

MR. MIRAGLIA: The issues at the time the decisions were made at the ISA, the ISA raised questions regarding that issue. There was not a definitive finding. They were saying, we see certain discrepancies within the FSAR and the licensing basis and our familiarity with other plants that this deserves further review. So that was an issue that was left to the staff for followup and further . 78

review and was not seen as an operability issue at that point in time.

Since that time, we, the staff, in concert with the region and the utility, have dialogued on that issue and then have determined that they did not. There was a conflict between the FSAR and the -- and how the plant was configured and due to modifications that were made they were not meeting the design basis in their FSAR and --

CHAIRMAN JACKSON: I guess the question becomes, we feel it's a safety significant issue?

MR. MIRAGLIA: It has safety implications for loss of off-site power. The issue comes down to they could make transfers with -- I think it was on the order of six hours and, in looking at the systems, we felt that rapid transfer and the time was too long and we took the position that they had to make the change. And on a relative basis it has safety significance.

MR. MILLER: If you compare the tech specs at Maine Yankee with a standard plant, they were far more liberal in terms of what the licensee could do, action statements, notifying the NRC and the like. So it was really a combination of the importance of this line and the vulnerabilities that the licensee talked about with respect to its reliability under certain circumstances and it talked about making modifications to the feed pump to help make it . 79

more reliable. And, coupled with that, concern about the tech specs not being sufficiently prescriptive on what

needed to be done where there were problems with the line.

CHAIRMAN JACKSON: The licensee indicated there had been some difference of opinion between the NRC and themselves with respect to this particular set of issues and I guess the question becomes one of the time frame for assessing the safety significance and then was this loss of off-site power event that occurred in November the driver for both you and the licensee in terms of heightening the significance of it and therefore pushing it to the point where it's now a restart issue?

MR. MIRAGLIA: I think the issue was raised even prior to the loss of off-site and it was an issue that needed to be examined in the ISA, left as an issue and that was being reviewed by the staff even prior. The fact that it was a loss of off-site power event gave us the ability to perhaps look at the issue even closer and looking at the actions and how did the systems actually perform since they process was in place.

CHAIRMAN JACKSON: Mr. Jordan, did you want to make a comment?

MR. JORDAN: No, I think the process that we went through of identifying the issue, leaving it as a loose end, we were unable to come to closure on whether it was . $$80 \end{tabular}$

unacceptable or acceptable so we left it as a loose end. MR. MILLER: The part that was at contention was

really -- required going back into the deep bowels of the bowels of the licensing basis and I don't know that there was contention or disagreement over the safety significance of the line. I think it ended up being in one of these very difficult licensing issues that took some time for the licensing staff to research. That effort was hastened clearly by the loss of off-site power event.

CHAIRMAN JACKSON: Commissioner Diaz?

COMMISSIONER DIAZ: Yes. Has the staff made a determination whether sufficient redundancy was provided by emergency and auxiliary systems in the plant in the case of off-site power loss?

MR. MIRAGLIA: I think one of the things that was looked at, Commissioner Diaz, is in the context of looking at what had to be done and the timing for a rapid transfer and the operator actions is some of the consideration and those were the issues where the staff felt the rapid transfer in six hours was too much time.

In addition, there have been other issues that have been identified with respect to the facility in the electrical area that makes the risk significance of loss of off-site power for this plant an important kind of consideration. So all of those considerations were there in . 81 reaching the judgment that the system needed to be modified and the tech specs needed to be upgraded.

COMMISSIONER DIAZ: I understand that but, going beyond that, you know, in the case of off-site power, you know, in the case, you know, you know, significant load being imposed on a safety and emergency system. Has it been determined that the auxiliary feed water pump and the DC generators and all the components that are supposed to activate in case of off-site power, are those sufficient to provide adequate protection to health and safety?

MR. MIRAGLIA: Yes, and there was one concern with respect to the reliability of the aux feed system that they are talking about upgrading. So I think in the context of that, one has to examine the issues in their totality. So we saw them as safety significant and risk significant in this case.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: So it wasn't just a question of -- let me make sure I understand then, that they have a certain capability in terms of protection of public health and safety but are you saying that the rapidity with which they could be loaded, the condition of certain parts of the system is what led to the concern?

MR. MIRAGLIA: Those are all factors that were in the consideration, yes, Madam Chairman. I think we tried to . 82

look at the information before us.

In terms of the question that you raised in terms of the issue that was the decision we made in October, that information was still yet undecided or being evaluated as Mr. Jordan said.

CHAIRMAN JACKSON: Okay, so it was identified then through the ISAT?

MR. MIRAGLIA: As an issue and we were exploring that issue. Some of these other issues are also outgrowths of the utility's followup and our followup to some of the ISAT.

CHAIRMAN JACKSON: Commissioner McGaffigan.

 $\label{eq:commutation} \mbox{COMMISSIONER McGAFFIGAN: Just one technical} $$ question. $$$

Are these other issues going to be the subject of an additional confirmatory action letter that we are going to deal with --

MR. MIRAGLIA: Both of those issues that are on the slide as other issues were subject of a supplement to the confirmatory action letter that was issued, I believe, on the 30th.

> MR. MILLER: And I will be speaking to that. CHAIRMAN JACKSON: Okay. Thank you. COMMISSIONER McGAFFIGAN: Thank you. MR. MIRAGLIA: We have already addressed that

83

there are longer-term followup of licensee's actions for going to the power-up rate and I have addressed those.

CHAIRMAN JACKSON: So they are not part of CAL; they are part of the ISAT followup?

> MR. MIRAGLIA: For the power upgrade to 2700? CHAIRMAN JACKSON: Right.

MR. MIRAGLIA: Yes.

CHAIRMAN JACKSON: Okay.

MR. MIRAGLIA: At this point, Mr. Miller will talk about some of the activities since the ISAT.

MR. MILLER: I want to do three things. First of all, I will talk a little bit about what we have done since the ISAT, actually starting during the ISAT and then subsequently, to oversee licensee efforts. Secondly, talk about our observations, what we have seen over that period, and then talk about next steps, where we go from here.

First of all, it is very important to point out, and there has been a lot of discussion today about significance of issues, actually during the ISAT, while the team was independent of the region and of NRR, we were very close to the ISAT and to what it was finding to assure that at any point if there was information that called into question the operability of equipment that that information was assessed very promptly by the licensee and a conscious and a technical decision was made on the impact of that on functioning of equipment. In other words, an operability call was made.

I know there have been some questions about how this is done. The NRC does not make the operability calls; that is the obligation of the licensee.

We do, however, check very carefully, look over their shoulder, so to speak, to determine that the judgments that they are making are founded on -- have a reasonable foundation. So throughout this whole effort and certainly subsequently, as issues have emerged, such as the issues regarding cable separation and equipment qualification, we have been following closely what the licensee has done in terms of assessing those issues and their impact on operability.

MR. MIRAGLIA: May I just add to that, I think it is important the word that has been used by the utility at the table, by Mr. Sellman in talking about the processes. And the processes are to deal with the issues as they are identified. I think there have been examples of issues that were identified by the ISA that raised questions about degraded or nonconforming conditions and what did they mean to operability. And Hub has examples of those in terms of the EQ issue that was identified and dealt with and the MPSH issue with respect to 2400. Those were dealt with at the time.

85

The licensee has provided examples today. Mr. Leitch indicated, in following up on the logic testing, that raised concerns and they made operability calls. So there is a disciplined type process to look at each of these discrepancies and deficiencies to determine what does it mean to operations, what is the safety significance, what are the licensing requirements bound to be and what corrective action programs must there be. So there is a disciplined process that exists to deal with all of these issues.

Further, Mr. Leitch gave another example in terms of cable separation wasn't clear. But it had issues and questions and they took the conservative approach. So I think it is important that the processes are also broad enough and rich enough where the licensees identify and evaluate and our oversight is, you know, oversight on their primary responsibility. So it is a balanced hierarchial kind of system that provides that kind of balance for evaluating the safety significance and the licensing significance of issues as they are identified.

CHAIRMAN JACKSON: Okay, thank you.

Mr. Miller?

MR. MILLER: We have, of course, also continued to conduct the core inspections, the inspections of operations and maintenance. Principally, this is the resident . 86 inspectors at the site and they are, of course, backed up by specialists from the regions who conduct the inspections, for example, in the radiological protection area and there have been a number of events that have occurred since the ISAT and we have, of course, followed up on those.

There was a reactor trip on October 9 and the loss of off-site power event. What I am trying to say here is that we have maintained the continuing normal kind of inspection effort that goes with any plant.

We have engaged very heavily, we have been very

much engaged in assessing the findings of the ISAT with respect to enforcement. This is often a very tedious task because it does require you to go and look very carefully at the licensing and design basis to assure that we are on firm foundation when we move forward on that. And then, the last two bullets on this slide really speak to the efforts that we have had under way to monitor the actions that are being taken by the licensee as they have addressed these emerging issues.

Mr. Leitch talked about the testing of the high-pressure safety injection pump. And he talked about that being a very extensive undertaking and it is. We are in the process of reviewing the details of that test as we speak. That's an example of the kind of thing that we have done in the region with help from the program office.

. 87 CHAIRMAN JACKSON: In terms of this emerging issue review by specialists, do any of these issues have the potential of becoming restart issues and when will you know? MR. MILLER: Yes, ma'am, I mean there is always the potential. In fact, after the ISAT we didn't know, for example, about the cable separation issue or the additional

equipment qualification issues which arose out of the reviews that the company had done of calculations which specified the flood level inside containment.

Upon revising that calculation it was found that there were additional instruments that were submerged and weren't qualified for that, so there are a number of emerging issues. As they are found, we have had specialists there that understand the significance of them and, importantly, who understand whether the licensee is looking broadly enough at these issues as they arise to not just deal with the instant issue but to look for broader patterns.

CHAIRMAN JACKSON: I guess the real question has to do with do you have some sense of when or if that will come to closure?

MR. MILLER: I am very reluctant to answer that, because my experience has been, and I was going to say it in the next slide, that if a licensee is shifting from an approach to business which doesn't get to the low level

88

issues is not highly probing and questioning, then one has to expect, as you shift to the lower threshold higher volume problem reporting process, more aggressive testing, and the ISAT was very critical of the testing that was done at the station.

You have to expect that more problems are going to emerge. Backlogs are going to go up initially and in fact I think it would be good news when the backlogs rise initially Now eventually they have to deal with those backlogs but I mean I think that is the pattern really at all stations that are engaged in some sort of turn-around.

CHAIRMAN JACKSON: I guess really what I am trying to get at is simply this -- and I understand what you are saying -- the question then becomes do we have our own, to paraphrase some of your comments, process in place that will allow us to get quickly at, given that there are these CALs on the licensee as it is, to get at what may be other restart issues.

MR. MILLER: Yes, two things.

First of all, it's the licensee that will determine the pace at which these things are first identified and then resolved, but we have decided within the
last several days to invoke the manual chapter 0350 process which really simply is a process that assures a coordinated, integrated response between the Region and Headquarters.

It involves things like the establishment of a panel that is overseeing the whole scope of activities that are involved.

It involves keeping a list, a formal list if you will, of issues that need to be resolved prior to restart.

In other words, it forces a systematic approach towards these things to assure, you know, that we are timely but also complete in assessing the issues and making determinations and judgments will be made.

CHAIRMAN JACKSON: Is this going to require additional inspection resources?

MR. MILLER: I am not certain of that. I mean we are already applying heightened attention, if you will, and additional resources to Maine Yankee, and I think this is honestly a bit of -- Maine Yankee is still somewhat in an investigation and as they are discovering, I mean it's not possible at the beginning to know all of what is needed.

I intend to talk in broad terms about what we are planning to do and maybe when I do that it will answer your questions.

CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: I keep hearing about cable separation. I am getting more concerned about it.

Have we determined that this cable separation implies some correction due to, you know, requirements of . 90 IEEE 279 or reactor protection system, ECCS instrumentation and uranium safeguards instrumentation?

MR. MILLER: Yes.

COMMISSIONER DIAZ: All of the above?

MR. MILLER: Well, they have not provided the cable separation that is required by their licensing commitments, which are to various IEEE documents and the like.

MR. MIRAGLIA: And until that is resolved and looked at in some kind of detailed way, that question needs to be further investigated and examined.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: On the resource issue from the Region's perspective, you have -- you don't have Millstone any longer. We have got a separate project office which I am sure is welcome at least from a resource perspective --

MR. MILLER: But not from my perspective -[Laughter.]

COMMISSIONER McGAFFIGAN: Not from your perspective.

MR. MILLER: I still have --

COMMISSIONER McGAFFIGAN: We have Salem, we have, you know, you have a significant fraction of the plants that are currently on the Watch List.

91

Is there a resource issue as you go through this manual 3050 process both at Salem and Maine Yankee that needs to be called to the Commission's attention?

MR. MILLER: Well, I don't know that it needs to be called to the Commission's attention but, yes, there is a resource issue. The way we are dealing with that and without getting into a lot of detail is that we are getting contract help in several cases and in a number of the issues in the electrical area for example contract specialists who work for our people will be looking at those. Salem the same way.

We have had a number of people that the program offices release funds to help us or to augment our staff with specialist, but it is an issue that we will be working with.

CHAIRMAN JACKSON: How many manual chapter 0350 processes do you have in Region I at the moment?

MR. MILLER: At the present time with Maine Yankee, it will be two -- Salem and then Maine Yankee.

MR. MIRAGLIA: Millstone is not set up as a separate thing --

MR. MILLER: Right.

MR. MIRAGLIA: But in terms of the resources, I mean we have a programmatic -- the requests come in. We evaluate them and we try to get help not only from our own . 92 resources, from contractual dollars as well, and there's the resources that are at the other regions.

They do stress the organization overall in terms of providing that sort of support. That support is coming from somewhere else.

CHAIRMAN JACKSON: But at this point you feel that with that support from somewhere else you have a methodology?

MR. MIRAGLIA: The methodology is there and the resource. We are going to have to deal with those type of issues. The Acting EDO indicated this morning that we need -- when we feel that we need more, we need to make sure we bring those issues to them.

CHAIRMAN JACKSON: Okay.

MR. MIRAGLIA: And I think that is clearly the process. It's going to dislocate work and shift things around and we'll have to look at that and it might have programmatic impact in other areas and we'll have to -- our responsibility is to identify those and then make the appropriate decisions relative to prioritization.

MR. THOMPSON: And we will do that and we will address this on an agency-wide basis as necessary.

We will work within my organization first, and I may turn to Ed for some additional help from his organization but we will certainly identify what our

programs will be.

93

We do have some additional resources that the CFO will be able to make available to us.

CHAIRMAN JACKSON: Why don't we press on.

MR. MILLER: The next slide captures I think our observations.

First of all, I would say that in the area of operations the ISAT was positive with respect to most aspects of operations and we have continued to see good performance with respect to the evaluations that have been conducted, a number of startups and shutdowns.

They recently disassembled the reactor vessel to deal with failed fuel and the evolutions involved with that were well-handled, communications -- briefs and that sort of thing.

The independent team of course was quite critical and in fact one of the several root causes went to the question of questioning attitude and complacency. So the next two bullets really speak to that and our observations, and there has been talk about the recent implementation of the new learning process.

What we observe is what we have observed in many other cases where a new process is installed and that is growing pains.

The staff is struggling with how to use the system and how to categorize issues, what to report, what not. Perhaps more importantly what we are following is is there a change and a shift in questioning attitudes.

It is one thing to have a process but it's also more important to have people who know it's expected that problems get reported and we see some improvement there in the recent identification of some chemical volume control system valves that had been leaking for some time and had in fact contributed to an event that occurred earlier in the vear were raised -- but we have seen some other instances where practices had gone on and it was our view that they needed to be reported and weren't.

These weren't major issues but what I am saying is that it is the sort of thing that you would expect. While it is getting better, it is still somewhat mixed.

With respect to engineering, it is too early to judge what the effect of the systems engineering initiative will be certainly, but we have noted that on some longstanding issues, a diesel fire pump, for example, the aux feed pump issue, the licensee formed teams that focused on those to in a more comprehensive way attack the issues. That seems to be an improvement to us.

The follow-up on the specific issues from the ISAT has been by and large guite good and in fact it was an engineer who was pursuing issues relative to logic system 95 functional testing who identified the problem with cable separations and that emerged as a whole new area of problem, and I think that speaks to the thoroughness with which the licensee is approaching the identification of issues in the engineering area.

The quality of evaluations -- I think our feeling is that it is improving but still somewhat mixed.

Some of the early responses, the first responses to the cable separation issue in our view were not as broad as they needed to be and the steps taken did not adequately bound in our view the potential extent of that condition and as a result we in fact in December issued the Confirmatory Action Letter, which among other things required the licensee to develop a plan and to execute a plan that more comprehensively assessed the extent of that condition.

I won't go into the next item on equipment problems but I can confirm that the licensee has utilized this time of the shutdown to go after a number of the equipment problems and the aux feed pump issue that was talked about, the ventilation supply to the spray building which would ice up and cause the operators a lot of grief and difficulty -- a number of these things are being taken care of.

During this time though, as the licensee has looked, I mentioned the cable separation issue, another 96 issue was found with respect to the failure to have proper isolation between a safety-related electrical component and the non-safety related equipment and it was, as these things began to emerge and with the increased attention on the

service circuit line that we felt it important to expand the Confirmatory Action Letter and to stipulate a number of additional things that needed to be examined prior to -- and addressed prior to startup.

One of the issues really is the broad question of given the issues that have emerged with respect to design and design control, plant configuration, we are asking the licensee or requiring the licensee to do some sort of a broad review of that and to evaluate its root causes, and to determine what things, if any, need to be done prior to restart in that broad area.

CHAIRMAN JACKSON: These observations, are they being -- are they from and being documented in inspection reports?

MR. MILLER: Yes, ma'am. They are all part of the public record. A number of the things that I have talked about are so recent that they haven't been documented yet but they will be.

Just very briefly with respect to our view of the licensee response which was submitted in December, on December the 10th, you have heard yourself and you can make . 97 your own judgments about what was presented today.

At the broad level the plan does appear to address the issues that were raised by the safety team.

It's really a mix of things, the plan is. It's the sort of things that Mr. Flanagan and others were talking about with respect to commitment of funds and a number of initiatives to deal with organizational effectiveness issues, teamwork, communications and that sort of thing.

It also includes a plan on specific equipment. There are milestones and schedules for addressing equipment problems on a several cycle basis, and this next refueling outage for example will have them deal with the atmospheric steam dump valve capacity issue which was a fairly significant issue in the ISAT.

But importantly also it lays out the licensee response to broad programmatic issues such as just the whole question of testing and how they test the plant, the margins improvement program, configuration management and the like.

What we find is that the details are somewhat sketchy on some of these program issues. In fact, the issue relating to design is something that the company has deferred to their response to the 5054(f) letter that was issued to all the licensees, and so at this point and knowing -- I mean the devil of course is in the details and so we are reserving judgment on much of what is being . 98

presented.

We expect to have meetings with the licensee. We will be providing a response, written response, to the licensee on the plan, but I am certain that it will say that we will need additional meetings, but then perhaps even more important than that in the inspection context as we go out to the site and really dig into the details, it would only be then that we will fully understand the scope and have confidence that the schedules that they are on and their plans are indeed comprehensive.

As I mentioned, on the one area of design we did expand because we felt it important, even before restart to have some sense, more detail than we have now, their direction in that area. We felt it important to stipulate that as a condition of restart.

CHAIRMAN JACKSON: So you mentioned the one area.

Are you clarifying then those areas where you do feel that you need the detail as well as some movement before their proposed restart?

MR. MILLER: Yes, ma'am. I mean we have identified four or five very specific things that we can say right now are indeed issues for restart.

If there are other things that emerge through the 0350 process those things will be identified.

CHAIRMAN JACKSON: And how many of them do you

feel will be flushed out again? It's probably the same situation before the enforcement conference that is slated for March.

MR. MILLER: I don't have an answer for that one.

CHAIRMAN JACKSON: Okay.

MR. MILLER: I just really can't say.

CHAIRMAN JACKSON: All right, okay.

MR. MILLER: If I go to future plans, which is the next slide, there is the enforcement conference that the Chairman just referred to. That's on the schedule for March the llth. That will focus on the safety and the technical issues that came from the ISAT.

There are a number of matters that are under investigation and that will not be included in that.

CHAIRMAN JACKSON: Will that be a public, an open --

MR. MILLER: This will be a public enforcement conference held in the area to permit the public to of course observe the meeting.

Electrical issues. The slide was written over a week ago. As I said, we have expanded a bit the scope of the confirmatory action letter but, of course, we will be conducting the reviews that are necessary prior to restart and our having confidence that the company has addressed all those issues that are required before restart.

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I expect that also that will involve some level of public participation, most likely a public meeting. In fact, the confirmatory action letter does require for them to present results to us in a meeting that will certainly be a public meeting.

Thinking and looking very long term, we of course will be following up on all of the issues that have arisen. There have been a number of conversations or discussions here regarding the size of the backlog and the like and we obviously cannot check the status and the resolution of every item and so we have the resource limitation and constraint that we have talked about here. So our effort will be a risk-informed, smart-sampling approach and fundamentally what we are looking for, of course, is there in fact change with respect to problem identification, with respect to the processes that the ISAT has pointed out as being weak, in addition to checking to make sure that specific items are, in fact, addressed.

CHAIRMAN JACKSON: Who is going to be doing this risk-informed smart sampling?

MR. MILLER: Well, this is the regional inspection force. An example of this kind of inspection is one that begins next week. It is an inspection that involves, of course, folks from the region, human factors specialists from the program office. Of course, we have our -- the . 101

experts who are savvy on the IPEEE and that sort of thing,

the PRA, to help inform our judgments about what to look at.

But the inspection next week that begins, we will be looking at the whole area of corrective actions. It's just one inspection and I expect that, as I mentioned earlier, will be a byproduct of all the inspections that we will do.

We have other inspections that are planned in the area of looking at ventilation issues, the electrical issues that I have talked about, maintenance and so on. But a thread running throughout all of those will be an assessment of basic corrective action and the sampling that will be done will always be informed of what the IPEEE is telling us about what's important.

CHAIRMAN JACKSON: I know you haven't completed your review, according to this slide, of the Maine Yankee response to the ISAT report but do you have any preliminary assessment as to the sufficiency of Maine Yankee's response?

MR. MILLER: I would say, as I mentioned a moment ago, and at the broad level, it covers all of the issues and in some areas there is a lot of detail but in some areas, such as in the area of design, design reviews, I mean, there are all kinds of things that can be done and talked about with respect to configuration management and it takes really sitting down in a detailed meeting to understand does that . 102

involve critical slice --

CHAIRMAN JACKSON: So it is premature to give some in-depth assessments?

MR. MILLER: I think it is on some of the broad programmatic issues. With respect to the individual equipment problems, I have mentioned commitment to fix the atmospheric steam dump valve this coming fueling outage and it is my impression, and the staff hasn't completed their work but on those things the staff's first cut at it is that those plans appear to be reasonable.

But we will be completing that review and having something back to the company sometime in February.

MR. MIRAGLIA: In response to I believe it was your question, Madam Chairman, relative to what do all of these design issues mean and what's in the backlog and those kinds of issues that were addressed to the utility, there is indication that they are still looking at those kinds of things. I think we need to have an understanding of how they are going to approach that and how are they going to say what's needed before restart, what can come later and their basis for that and do we have agreement. That dialogue is ongoing and some of it is yet to come.

MR. MILLER: Lastly, I am glad that Peter Wiley and Uldis Vanags are at the table. But I think there was good cooperation with the state throughout the whole ISAT. . 103

We continue to be in touch and close contact with the folks from the state and we expect to continue that, not just here in the near term as the plant resolves the issues that need to be resolved before restart but over the longer run as we gauge their performance.

CHAIRMAN JACKSON: Let me stop you for a second. I mean, I am going to -- have you, one of you represents the governor and the other is the state safety officer. Have you been satisfied with your degree of involvement, understanding of what we are doing and plans for how things are being monitored going forward?

> MR. WILEY: Yes, absolutely, Madam Chairman. CHAIRMAN JACKSON: Could you say who you are?

MR. WILEY: I am the special projects director in the governor's office. Uldis Vanags is our state nuclear safety advisor.

We do not come today with any prepared statement but I would be remiss if I did not pass along the governor's appreciation for the collegiality, the consensus building relationship that we have developed with the NRC throughout this process.

We are here basically today not only to observe but to send you the message that we support and we reaffirm the process as it is going on.

I think just a couple of points first to pick up, . 104 Chairman, on an analogy you used earlier. I think the ISA has put the significant threads on the table. As those threads have been pulled, the process continues to work. We have seen actual improvements on safety and beginning to restore those margins.

Secondly, and probably from our perspective most importantly, we do feel that we have formed from a relationship that has had to, in the cauldron of events, if you will, over the last 18 months has gone to a different level. It is a relationship that we do feel has the best interests of the citizens of Maine at heart. It has been a difficult 18 months from the -- I work with the ISA. The work of Ed Jordan, Alice Merschov and the others our continued, our new and our continued relationship, I am sure, in the future with Hub Miller. We do bring to you the confidence that your process is working.

So we look forward to the continued opportunity to do that. I will say that I hope the intensity and frequency, however, of that does diminish somewhat over time. But we just appreciate the opportunity to be here today and to have been part of this process throughout the last year-and-a-half.

CHAIRMAN JACKSON: Thank you. Mr. Vanags, do you have any comments you wish to make at all?

MR. VANAGS: I will just say a few words. I think .

the cooperation we received has been exceptional. Being part of the ISAT was personally a very valuable experience for myself. I have never been through such a detailed search of a nuclear power plant looking at problems that may be embedded. It was quite an eye opener.

I would like to say that the professionalism and the quality of the people on the team was outstanding. I can't say enough about that. It says a lot for NRC.

To this date, if we just continue the cooperation, it is working very well and I hope it continues. Maybe not at this high a level, as Peter said, but I look forward to continuing in our close cooperation and understanding the issues and just working forward.

CHAIRMAN JACKSON: Thank you.

MR. MILLER: I guess just in closure I am an inspector so I have to put this last slide out there.

Maine Yankee is in transition. Entergy is going to assist but still the organization is in transition and frankly is under some stress. We know that even when proceeding on the best of intentions and having recognized problems, it will be a struggle. So it bears close watching, not just with respect to the design-related issues but from an operational safety point of view.

Are they able to both deal with the problems that

have emerged and the investigations and in the

investigations that will continue in the design arena but will they be able to maintain their focus with respect to operational safety.

Lastly, I have to say that judgments, final judgments about whether there has been permanent and lasting change, someone earlier talked about looking for a long-term self-critical, sort of a self-sustaining approach to life and making judgments about that is going to take some period of observation.

CHAIRMAN JACKSON: By that, do you mean hard inspection?

MR. MILLER: Hard inspection and -- and some time, not just --

MR. MIRAGLIA: I might observe it is a paraphrase of your performance is as performance does, Madam Chairman. CHAIRMAN JACKSON: Right.

MR. MIRAGLIA: And I think Mr. Flanagan has heard it from a number of places within the agency and the staff as well.

MR. THOMPSON: That completes our prepared presentation and we would be pleased to respond to any questions.

> CHAIRMAN JACKSON: Commissioner Rogers? COMMISSIONER ROGERS: No, I have no questions. CHAIRMAN JACKSON: Commissioner Dicus,

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Commissioner Diaz, Commissioner McGaffigan? COMMISSIONER McGAFFIGAN: Just one question. It may lead into the next panel.

Implicit in Mr. Flanagan's comments earlier was -you know, he's trying to do his job as chairman of the company and he is reading the INPO and SALP reports and basically 1.5 was the last SALP he had gotten.

Did we and perhaps others let him down in terms of prior to this proceeding year in terms of the vigor of our inspections? Does anybody want to comment on that?

 $$\rm MR.\ THOMPSON:\ I$ think I will turn here to my right for that.

MR. MIRAGLIA: I think, in a number of instances, Commissioner McGaffigan, every time we have something like this the question is, what did we miss.

CHAIRMAN JACKSON: And how did you miss it.

MR. MIRAGLIA: And how did we miss it and what is the significance of it, not only to this plant but to our program. As I indicated, the allegation that came forth in December, we took action. That action was with respect to Maine Yankee and we put -- what does it mean from a lessons learned from a lessons learned and what can we learn from those type of processes.

In addition, the ISAT looked at not only those issues for this facility but what did it mean to the program . 108 and there were specific recommendations that we're

developing an action plan that is going to go to the EDO at the end of the month.

So in terms of did we focus and see some of these issues, I think it would be fair. The normal performance indicators would tell you this plant was performing very, very well.

Mr. Vanags indicated that perhaps there were some embedded issues and we've looked deeper. We're pulling the threads, as Mr. Wiley said and we have a process for evaluating where we are, what does it mean to the continued operation of this plant, what's the safety and risk significance of that so we can make considered judgments in a disciplined kind of way.

 $\label{eq:CHAIRMAN JACKSON: And you are bringing forth the lessons learned.$

MR. MIRAGLIA: In addition to that, yes, not only for Maine Yankee but in the broader sense as well.

MR. MILLER: If I could add, and this really goes to the discussion we had last week on this, many of the issues that have come forward are really issues that require a -- I'll call it a deep vertical slice type of inspection and they require a certain level of expertise and I think that there has been a lot of discussion over how the NRC's abilities in that area and what we have done over the past . 109

several years has been somewhat limited. And we have supplemented the staff with some architectural engineering help to begin to do these vertical slice inspections at all of the plants and at some point virtually all of them will have some sort of a safety system functional inspection to use one technique performed on it.

So part of it is that. Part of it is that we were not, as a routine, looking as deeply as the ISAT did with the large team and the kind of expertise that was there, but not all of it. I mean, there are other lessons to be learned and we are about learning those.

CHAIRMAN JACKSON: Okay.

MR. MIRAGLIA: Madam Chairman, you had a question for the staff early on that we haven't address and it's in terms of Entergy and what it might mean to potential licensing activities.

CHAIRMAN JACKSON: Thank you. That's correct.

MR. MIRAGLIA: In brief, we have indicated to the company at various levels that this is important to us because it does have potential significance in terms to our license and amendments and we need to know the extent and scope for us to fully understand it to determine whether there are licensing matters to be dealt with.

CHAIRMAN JACKSON: But the point you are making to me is that that is something that you intend to specifically . $$110\ \end{tabular}$

review?

MR. MIRAGLIA: We have to understand in each case where are they and what's the implication to that and I think the company understands that. They are in a developing kind of relationship and at the appropriate time we will sit down and discuss it, their staff with our staff, to determine what implications are to the licensing.

CHAIRMAN JACKSON: Because this has some larger implications, not just with respect to this particular licensee but as the industry itself is restructuring and working out various arrangements, when you feel that you have gleaned what issues there may be within licensing space with respect to this licensee, it would be, I think, helpful for you to propagate that solution.

MR. MIRAGLIA: We are looking --

CHAIRMAN JACKSON: Because I think that will

inform our process in terms of what we need to do relative to the various changes.

MR. MIRAGLIA: We are looking at this issue in the context of that overall plan as well.

CHAIRMAN JACKSON: Commissioner Dicus, did you

have a comment you wanted to make?

COMMISSIONER DICUS: I think Mr. Miller partially addressed it but maybe I'll go ahead and make that comment or ask my question.

111

In light of the fact, if we were to pick a plant at random, a fairly good performer or average performer, and do the kind of look that we are doing at Maine Yankee and others, are we going to find similar problems?

MR. MIRAGLIA: I think the answer would have to be our expectation is that issues would be identified. It is the question of pervasiveness, degree, significance and these kind of things. The issues, I think it would be naive to say that we would not identify issues and problems.

The regulatory program is a process and I think the context is that when these discrepancies, weaknesses, deficiencies are identified, they need to be looked at and examined as to what did they mean in and of themselves, what did they mean in the broader context for that facility and it is an ongoing, evolving type of process.

The design basis reconstitution was an issue that was addressed and looked at by the Commission in '92. The policy statement was there. It has been a longstanding understanding that that's licensee's responsibility. We need to go out and make sure they are fulfilling those responsibilities.

I think the processes are in place. I think the 50.54(f) letter in that is part of our processes. So I think we are responding to what we find and I think we have to deal with these issues as they are identified in terms of . 112 number, significance and corrective actions as mandated by

the regulatory process.

MR. MILLER: Let me just add, in selecting who is next to be the subject of these safety system functional inspections, we have tried to pick those plants that when you look at the processes like problem identification and the like, where would we most likely next find it? So what you might see is as things emerge, we are going after those plants that -- I believe this is how we are selecting them -- which ones would, if you were to say, might have problems, go after those first.

CHAIRMAN JACKSON: I guess my only question to you is the 50.54(f) letter is a particular -- will provide a particular snapshot in time and I think, as I have been told, you know, the Commission has gone on record in terms of its position in the past with respect to the importance of these design basis issues and our expectation was that licensees would be addressing them and we had stepped back from doing the design basis inspections.

So the question becomes, once we have the 50.54(f) responses and we use what we glean from those responses as a basis for going out and taking these deeper looks in cases where it seems to be warranted, then we've done that. The question is, what is the going forward approach? Are we going to have a heightened sensitivity in looking at the .

engineering area, particularly as it relates to operability of key systems and use that as a basis to give us a heads up as to where we may need to take a deeper look at some point down the line? The real question is how do you keep a handle on the overall envelope here without going overboard?

MR. MIRAGLIA: I think the answer to all pieces of that question is, yes, we are looking at those aspects and

how do we redirect the inspection program to make sure that we are testing that process. In terms of what may need to be done in addition to that process, I think we need to see what some of the results are.

We've done three architect engineering inspections to date. The reports are in the process of being written. I think we have had the exits on all three facilities. They have found some issues, some more significant than others and I think the results will be informative and instructive to us as well as to the following steps. I think we have engaged in the process and I think we need to keep moving down the line.

CHAIRMAN JACKSON: I think Commissioner Diaz has a question.

COMMISSIONER DIAZ: Just a final thing, I heard it three times and when something is three times, it racks my brain. You said twice, Mr. Miller, and once, Mr. Miraglia, that safety system function inspections are essentially at . 114

the core of this. Is that correct?

MR. MILLER: I think it's one of the more penetrating kind of inspections that we do. And it is principally because of the level of expertise that we tapped to perform --

COMMISSIONER DIAZ: Commendable.

CHAIRMAN JACKSON: Mr. Thompson.

MR. THOMPSON: Although we are focusing new attention to the aspect of design and engineering design, that's not to say we don't focus also on operational safety. So it's a balance we have to do. We have to obviously work within our resources but obviously it is -- we look where the risk-informed aspect is and that's what Hub was saying earlier, that we will make smart decisions and we will try to do that as best we can and, likewise, we will give attention to operating plans that need attention to operating plans, as you well know.

CHAIRMAN JACKSON: As we well know.

Thank you very much.

We have four members of the public from whom we will hear in turn who will go to the podium. Okay, thank you, each for five minutes.

We will first hear from Mr. David Lochbaum of the Union of Concerned Scientists.

MR. LOCHBAUM: Thank you. Good afternoon. I am . 115 David Lochbaum, Nuclear Safety Engineer for the Union of

Concerned Scientists.

I came here today for two reasons, to convey two points, the first point being that the Independent Safety Assessment Team's conclusions reached at Maine Yankee regarding its primary objective are not supported by its own findings.

The second point is that the ISAT was absolutely wrong to use the SALP evaluation criteria in its assessment. Slide 2, please.

Regarding the first point I would like to make today, quoting the ISAT report, the overall goals of the Independent Safety Assessment were "to independently assess the conformance of Maine Yankee to its design and licensing basis."

The ISAT report concluded that Maine Yankee was in general conformance with its licensing basis, although significant items of nonconformance were identified, and also that despite uncorrected and previously undiscovered design problems the design basis and compensatory measures adequately supported plant operation at a power level of 2440 megawatts thermal.

Maine Yankee had not operated -- had been operated to operate above 2440 since June of 1978 so it wasn't part of its current licensing basis to operate at only 90

percent.

Slide 3.

CHAIRMAN JACKSON: Repeat that statement.

MR. LOCHBAUM: It wasn't part of its current licensing basis to operate at 2440. The ISAT should have focused at was it safe to operate at 2700. That was its current licensing basis.

On Slide 3 the ISAT documented numerous changes or numerous problems that resulted in physical plant changes at Maine Yankee, those that have already been made and those that are scheduled.

Examples are the thermal release that required a plant shutdown last summer, the EQ components that are being relocated to keep them below the water -- or keep them above the water level inside containment; spray building dampers were blocked open and 15 feet of missing circuitry were replaced on a safety pump.

The ISAT conducted this evaluation using two vertical slice reviews, two deep vertical slice reviews of two safety systems and vertical slice reviews to a lesser degree of two other safety systems. There are far more than four safety systems at Maine Yankee.

Maine Yankee is currently shut down under a Confirmatory Action Letter to correct numerous safety problems.

117

CHAIRMAN JACKSON: Let me ask you, what is your message with respect to the fact that there are many systems with safety functions?

MR. LOCHBAUM: Well, it gets to a point I'm making later is that going in and doing a sampling of four systems, finding problems in all four systems, and then concluding that everything else is okay just doesn't seem appropriate and it doesn't seem to be supported by the ISAT's own findings.

If you do a sampling and everything you looked at is problematic, I don't see how you can conclude that the other 36 systems were okay.

CHAIRMAN JACKSON: Okay.

MR. LOCHBAUM: Slide 4. The NRC still refuses to permit Maine Yankee to operate at 100 percent power, which is its current licensing basis due to insufficient cooling water, inadequate suction pressure for the containment spray pumps. That licensing basis has been in effect for 17.5 years.

The ISAT's charter was to determine if Maine Yankee was in compliance with its design and licensing basis, not to determine if Maine Yankee could fix those things that the NRC brought to their attention or if Maine Yankee could operate safety at some fraction of its license power level.

118

Slide 5. The ISAT's conclusions reflect at best the condition of only the four safety systems evaluated, not the other 36 some-odd safety systems.

In my opinion, it is extremely poor judgment to

conclude that these systems satisfy their design or licensing basis at the time of the ISAT, not afterwards but at the time the ISAT arrived on site.

It is even worse judgment to conclude that the remaining safety systems at Maine Yankee conform with their licensing basis based on the results from this sampling exercise.

If I get pulled over for speeding coming up here today, I couldn't have hoped to avoid getting a ticket by showing the officer my speedometer is now reading zero unless it's an NRC cop.

Slide 6. According to the ISAT -- this is the second point where we contend that it was absolutely wrong for the ISAT to use the SALP criteria.

Quoting from the ISAT report, "The assessment relied on existing NRC benchmarks for assessing performance utilized in the NRC Systematic Assessment of License Performance program, SALP.

During the December 16th Commission briefing on SALP and inspection programs, the Staff stated that the reason for not have an Unacceptable SALP category is that . 119 the SALP lags the reporting period and that any necessary corrections will be made prior to the time of the SALP.

We have no argument with that.

Slide 7.

However, the ISAT's charter was completely different. It was to determine plant safety status at that moment, not six months or 18 months previously but at that moment. Therefore, it was wrong for the Staff to use the SALP scoring system for such an inspection.

Unlike SALP an Unacceptable score for such an inspection is extremely necessary, especially when warranted. In fact, not to have an Unacceptable score for such an inspection makes the whole effort unnecessary. Why bother looking when the answer must be Acceptable?

In addition in conclusion the use of the SALP scoring system corrupts the NRC's enforcement action process.

We find it difficult to see how the NRC could turn around and fine take civil penalties against the licensees for behavior it finds acceptable.

Thank you for listening and considering these remarks.

Do you have any questions?

CHAIRMAN JACKSON: Commissioner Rogers, do you have any questions?

120

COMMISSIONER ROGERS: No. CHAIRMAN JACKSON: Commissioner Dicus? COMMISSIONER DICUS: No. CHAIRMAN JACKSON: Diaz? COMMISSIONER DIAZ: No. CHAIRMAN JACKSON: McGaffigan? COMMISSIONER McGAFFIGAN: I would like to at least just note commendation for UCS playing the role it did in December of 1995, if you are the person to thank --MR. LOCHBAUM: No, it's the organization. COMMISSIONER McGAFFIGAN: The organization? CHAIRMAN JACKSON: It's his predecessor. COMMISSIONER McGAFFIGAN: Your predecessor. I do think that obviously helped us get into the situation where we were taking very deep looks at the facility. MR. LOCHBAUM: I was going to appreciate that -or acknowledge the appreciation for it but I would also like to point out that we didn't send the allegations to the NRC. We sent them to the State of Maine because we thought the State of Maine was more concerned about getting the result, the concerns resolved, so we didn't send them to the NRC.

CHAIRMAN JACKSON: It's okay. You raised the issue and that is the point the Commissioner is trying to make.

MR. LOCHBAUM: Thank you.

121

CHAIRMAN JACKSON: Thank you very much. Mr. Linnell, who is a Town Councilman from Cape Elizabeth, Maine.

MR. LINNELL: Chairman Jackson, members of the Commission, ladies and gentlemen, my name is Bill Linnell. I am a Town Councilor from Cape Elizabeth. I am the spokesman for both the oldest nuclear watchdog group in the state of Maine, Committee for a Safe Energy Future, although you'll see on the letterhead we have shortened our name to Maine Safe Energy.

I am also the spokesperson for Cheaper, Safer Power, which you will hear about in days ahead. It is formed with the specific intention of shutting down the nuclear plant, and I need to just tell you that in terms of full disclosure -- in the interest of full disclosure.

One thing I have just heard today, it sounds to me like the contract with Entergy is not yet signed and so that is still on the drawing board as I understand it, and that is just a comment.

If I could have the first slide.

I think one of the issues we have to look at is has Maine Yankee credibility been a problem?

Everyone in this room is aware of the problems which the anonymous letter brought into the open, and what you see on the overhead is the official company response to . 122 the anonymous letter, and I just think that we should not

forget what the company had to say about that.

Furthermore, I was surprised to hear today that dealing with the steam generators was mentioned as a proactive approach to dealing with problems at the plant. If you look back in your files to 1990, December 17th, when Maine Yankee had a steam generator tube rupture, you'll see or at least the press releases were that it was a small leak.

In fact, it rose to over a 2000 gallon a day leak rate by the time they got the plant shut down.

I went to several of the presentations on steam generators in Washington, so forth, when they were wrestling with this issue and I encourage you to go back and look at the files and I think you will see that the biggest problem they ever had with the steam generators was not in their presentations. When they were talking about the history of steam generator problems at Maine Yankee it was noticeably absent and it took me about three years to find out what I have just told you.

Next slide, please.

The ISAT report identified economic pressures, the first of two root causes of safety problems at Maine Yankee. We have touched on that already to some degree. Next slide, please.

123

further identified the lack of retained earnings as the cause of economics at Maine Yankee. In other words, the NRC Staff concluded that Maine Yankee owners were taking the profits away from the company, not leaving Maine Yankee enough earnings to run and maintain the plant properly. Next slide, please.

The Commissioners will perhaps recall their October 18th discussion in which Commissioner McGaffigan attributed the first root cause, economic pressure, to the retained earnings issue, stating that it must come from pressure from the owners. I certainly agree with that. Slide 5, please.

Maine Yankee disagrees strongly with the cause of the first root cause and has been touched on already today the company response now is that the actual limiting factor was management's funding requests. I'll wait to see how you, what ultimately your decision is on that, but I find that really hard to believe, that there wasn't some pressure from management.

Number 6, please.

I call TMI Action Plan Items II.K.3.30 and 31 the "mother and father of all work-arounds." Operator work-arounds have been appropriately identified as chronic problems, yet Maine Yankee has been allowed to work around 124

these critical TMI Action Plan items, II.K.3.30 and 31. Meanwhile, the NRC has not produced the analysis

to justify operation of Maine Yankee at any power level. I have heard again today the bounding argument and I have heard this -- this was explained to me by Bob Pollard and others -- Henry Myers you have gotten a lot of literature from -- he is a physicist also.

What they explained to me is that the assumption that a small pipe break is covered by the large pipe break analysis is simply wrong. They tell me you just can't do it. I just will leave that up to you. You know better than Ι.

Next slide, please.

What I would like to point out is I see it's very difficult for the NRC to expect licensees to follow NRC regulations to avoid work-around conditions if the Commissioners allow the biggest work-arounds of them all to continue. Thank you. Next slide.

I think now we all have to consider is Maine Yankee's owners' credibility an issue. I encourage you to ask them what replacement power costs, or what they pay for it when Maine Yankee is shut down.

Maine Yankee's owners have been leading the public to believe that replacement power is more costly than Maine Yankee power. In truth, Maine Yankee power is now about 50 125 percent more expensive than replacement power. CMP has been

saving over \$2 million a month on replacement power purchases.

They have been doing some interesting math at Maine Yankee and at Central Maine Power. Apparently they are adding their overhead costs to what they say the are paying for replacement power. If they are willing to deceive the public, I wonder why the NRC or anyone else should trust them. Next slide, please.

Conclusions -- Maine Yankee's owners' excuse for inadequate funding is simply not believable.

Number two, if the NRC intends to deal with the

first root cause of economic stress, the NRC must act decisively and forcefully on the retained earnings issue. I think the fact that the Chamber of Commerce is here to speak today at a safety meeting demonstrates the degree to which economics has negatively impacted safety. Slide 10, please. CHAIRMAN JACKSON: I thought there were 9 slides.

MR. LINNELL: Should be 10.

CHAIRMAN JACKSON: Okay, go ahead. How many

slides do you intend --

MR. LINNELL: This is the last one, number 10. CHAIRMAN JACKSON: Okay.

MR. LINNELL: It's the second one entitled

"Conclusions."

126

The NRC must set a reasonable example by not allowing Maine Yankee to restart without complete resolving safety violations nearly two decades old.

Finally, the first root cause of safety problems at Maine Yankee, economic pressure, is very likely to increase because replacement power is cheaper. Thank you.

CHAIRMAN JACKSON: Thank you.

MR. LINNELL: Any questions?

CHAIRMAN JACKSON: Mr. Rogers, do you have any questions?

COMMISSIONER ROGERS: No, I don't. CHAIRMAN JACKSON: Commissioner Dicus? COMMISSIONER DICUS: No. CHAIRMAN JACKSON: Commissioner Diaz? COMMISSIONER DIAZ: No questions. CHAIRMAN JACKSON: Commissioner McGaffigan. COMMISSIONER McGAFFIGAN: Let me just ask the

obvious question.

You heard Mr. Flanagan earlier today talk about the additional resources he is putting in and the additional resources he says the Board is willing to put in for some very sustained period of time. I don't remember his exact words but it was something along those lines.

> Did that change your opinion in any way? MR. LINNELL: Not really, because they certainly

127

need, with all the attention that's on them, they certainly need to throw some money at the problem and they say they are committing \$30 million or so to the issue.

There's no requirement, there is nothing in writing that says they are going to spend \$50 million next year, \$30 million the following year, and so on. I think it strikes me as sort of a confession on the courthouse steps.

Then I'd return to the issue -- we can buy, there are about 20 sources of power available to the New England Electricity Grid which are cheaper than Maine Yankee. The more they spend, the more desperate their economic situation may become.

CHAIRMAN JACKSON: You were talking about their adding two figures together that shouldn't be added. What were they?

MR. LINNELL: Right. Most of this is their message to the public. When asked what they pay -- for example, they will tell the public, well, we have got to get that plant back on line because we are paying a thousand dollars -- I'm sorry, a million dollars a week for replacement power.

Well, that is half the truth. The other half of the truth is that if Maine Yankee were on line today they would paying about \$1.5 million a week for replacement power, and apparently when I have engaged them in

128

conversation they explained to me that they are taking Maine Yankee's fixed and I would submit uncontrollable costs and adding them to the cost of replacement power when they talk about the cost of replacement power.

But what they actually pay for replacement power on the market is significantly cheaper now than Maine Yankee power and that is a bigger reason why we are moving forward with a referendum, because we believe their economic issue has a lot of holes in it.

CHAIRMAN JACKSON: So what is the fundamental point that you want to make with us today or that you are asking the Commission to address?

MR. LINNELL: I am asking the Commission not to let the plant restart until the plant is significantly in compliance with NRC regulations.

I am asking that the other 36 systems be looked at and I won't repeat what Dave Lochbaum said.

I'd point out that even if Entergy came in and worked for free for Maine Yankee that would not change the fact that replacement power is cheaper.

I do have a question which I didn't write down. I want to, at some point I would like to know an estimate from the NRC what the cost of the added oversight, the being on the Watch List, and those inspections, just a rough idea at some point what that might be.

129

I am assuming that is passed on to the licensee. Thank you.

CHAIRMAN JACKSON: Thank you. Mr. Raymond Shadis, with the Friends of the Coast.

MR. SHANDIS: Chairman Jackson, Commissioners, good morning to you. You have my admiration for your stamina in being able to sit this long. I am, frankly, very much relieved to get up out of that chair. If you would like to stretch and take part of --

 $\label{eq:CHAIRMAN JACKSON: I think the best thing we can $$ do is to move along. $$$

MR. SHANDIS: Okay.

I have been asked by the 400 members of Friends of the Coast Opposing Nuclear Pollution, most of whom reside within the plant evacuation area, to present their sentiments, citizen sentiments, to you, the government. I hope that in your busy schedules you have had a chance to read our written submissions.

I must tell you that we found a number of typographical errors in the submission that was sent by mail and we have placed a corrected copy with some small amendments at your places at the table.

In the additions, we have included some additional material on reactor embrittlement and on the condition of welds in the primary piping, primary side.

130

I want to introduce you to our attorney who is with me today, Mr. Jon Block. He is seated right here to my right and if any legal questions arise during our conversation today, I hope you will ask him.

We are not here to deliver a lecture. We have submitted detailed written submittals, both the citizen critique of the ISAT and our comments in response to the ISAT.

Our comments in response to the ISAT are

essentially a call to action. We have listed six different items, two of which are solidly in the examination and safety area, the other four, which are also safety related, which are four items relating to the dissemination of information to sharing information.

I was reminded in looking at the form here today of the cry that came out of the social justice movement of the '60s. We, too, would like a place at the table.

This is a very fluid situation and it has put me in the position of extemporanizing today. It is a fluid situation because a few weeks ago we would have been asking you to put Maine Yankee on the watch list and we would have met that obligation with the same kind of trepidation that I feel today in trying to ask the Commission to go from the very laudable step of examining Maine Yankee with the ISAT to the next step, which is to finish that examination, to . 131

the next step which is to act on the findings of that finished examination.

The ISAT prospected through Maine Yankee. I like their analogy that they did a vertical slice and a horizontal slice. They certainly did. And old-time prospectors did very much the same thing, cut down through a hillside, cut into the hillside, get an idea of what's in there. That assay said that there are design problems at Maine Yankee. Now, the task remains to find out what is in the rest of the mountain.

I want to tell you that Maine Yankee's association with Yankee Atomic Electric is one of the primary causes of the problems in the ISAT. The ISAT identified two, as I recall. One is an attitudinal thing and the other thing had to do with the allocation of resources. But the third problem leading to Maine Yankee's troubles was their intimate bond with Yankee Atomic Electric, a confusion over who held the license.

We had the CEOs of both companies testifying before an NRC meeting, I believe in this very building, on July 30 at which they issued conflicting statements about who held the license for the first eight years. We have included excerpts from that transcript in the material we submitted to you.

They testified, some of the same officers who were 132

here today, that there was a confusion of shifting information, intermeshing at the interstices of the two companies so that responsibilities were lost in track in passing from one company to the other. Accountability was lost in track.

Yankee Atomic Electric ought to be a deep concern for this Commission. It has left a trail of devastation across all the power plants of New England. You are now concerned with the Pilgrim plant has some problems, Haddam Neck has some problems, Millstone has some problems, Maine Yankee has some problems. And if you pry up that rock, you are going to find underneath it Yankee Atomic Electric and their involvement as a hot-shot consulting company.

Now Maine Yankee has proposed to bring in some other hot shots. They are going to bring in some consultants from down south. I think they used to be called Mid-South Utilities, if I am not mistaken. Fine. Can they handle it, is the question.

In the meantime, the plant is shut down. The owners are expending something on the order of \$24 million a month on the work while it is being shut down. I think CMP said their share was 9 million, they own 38 percent. Let me figure that backwards, about 24 million.

CHAIRMAN JACKSON: Mr. Shadis, you have approximately one minute.

133

MR. SHADIS: Thank you for that warning. You could tell I was getting wound up and might carry on for a while.

Okay.

Now you have the golden opportunity. Maine Yankee is safer than it has been in a long time because it is shut down. The reactor vessel head is off. Now is the time to examine the faulty welds in the primary piping. NRC ought to do it with contractors, not rely on the sworn testimony of a company whose sworn testimony has proven faulty in the past.

NRC ought to go in and take a look at the -revisit the reactor embrittlement issue with Maine Yankee because they depended on Maine Yankee analysis and Yankee Atomic Electric analysis for the results on that issue.

NRC ought to do a thorough -- what we call a global examination of Maine Yankee. There have been faulty fasteners, there have been faulty welds. We had a steam line break. The issues have been raised before. And I just want to point this out to you and I'm done, if you'll allow me.

May I?

CHAIRMAN JACKSON: Make your final point, please. MR. SHADIS: Thank you, ma'am.

This, 600 pages worth, is a Franklin Institute

report done for the NRC, is a review of licensee's resolution of outstanding issues from NRC equipment, environmental qualification, safety evaluation reports. It was done in 1983. It raises submergent issues, it raises issues of the high-energy line break scenarios that were also raised by the ISAT.

I want to commend the ISAT for compressing a thorough -- we called it the world's largest, most extensive examination of a nuclear power plant anywhere in the world -- into a document this thick when one phenomenon and two items got compressed into 600 pages years ago. I believe it shows we are making progress.

Thank you very much. CHAIRMAN JACKSON: Thank you. Commissioner Rogers? COMMISSIONER ROGERS: No questions. CHAIRMAN JACKSON: Commissioner Dicus. COMMISSIONER DICUS: No questions. CHAIRMAN JACKSON: Commissioner Diaz? COMMISSIONER DIAZ: No questions. CHAIRMAN JACKSON: Commissioner McGaffigan. COMMISSIONER McGAFFIGAN: No questions. CHAIRMAN JACKSON: Mr. Connors from the chamber of commerce. Thank you.

MR. CONNORS: Thank you very much.

. 135 Chairman Jackson, Commission members, my name is Dana Connors and it is a pleasure for me to have the opportunity to appear before you today.

First of all, to have the opportunity to listen and learn, it has been very instructive and I only wish that more had the opportunity to avail themselves of this occasion. I also thank you for the opportunity to appear to present testimony.

I appear today as president of the Maine Chamber and Business Alliance, Maine's largest business organization. Our non-profit organization represents approximately 1,000 businesses across the state of Maine from the largest employers to the individual entrepreneurs.

We are financed entirely by dues and contributions from private companies and for more than 20 years our organization has supported the Maine Yankee nuclear facility in Wiscasset, Maine.

I am pleased to appear before you today to once again voice our support for an important economic and energy asset in Maine. Since 1972, Maine Yankee has provided roughly one-quarter of Maine's electricity at one of the lowest available costs. During the plant's 25 years of operation, its safety record has ranked it among industry leaders, the fact which Maine citizens have come to both rely upon and appreciate.

In addition to the low-cost electricity that the plant continues to provide, Maine Yankee employs over 500 Maine citizens with a 1996 payroll of \$30 million.

136

Last year, the corporation purchased more than \$30 million in state and local taxes and fees and goods and services. As you can see, the plant represents an important part of the state's economy and its continued operation will mean much to Maine's overall economic health.

The environmental benefits of nuclear power are well known to the Commission. They only observe that the business community in Maine has made every effort to successfully meet the requirements of the Federal Clean Air Act Amendments of 1990. Generation of electricity that Maine Yankee provides our state with a source of electricity that does not add greenhouse gases to Maine's air and generates significantly fewer ozone causing pollutants than comparable fossil fuel electric generation alternatives.

At a time when the state may be facing additional clean air mandates as a result of new ambient air quality standards, continued operation of Maine Yankee allows us to meet our federal clean air environmental obligations into the next century as well.

I am here today because Maine citizens are concerned about the future of Maine Yankee. As you well know, the people of Maine have voted in three referenda over . 137

the past two decades, each time supporting continued operation of the plant in the face of a vocal minority to shut Maine Yankee down. Indeed, a January 24, 1997, public opinion poll by the Portland Press Herald found that 54 percent of Maine people oppose an early shutdown of Maine Yankee despite the fact that the plant's operating problems have been in the news almost continuously over the past several months.

I believe that Maine people continue to support Maine Yankee while at the same time holding the plant to the highest operating and safety standards. I repeat, holding the plant to the highest operating and safety standards.

In that regard, recently you have placed the Maine Yankee facility on your watch list. I understand from press reports and certainly it has been confirmed here today that watch list designation will require and will mean even greater regulatory scrutiny of Maine Yankee in the months and years ahead. We welcome your efforts and we believe them to be fully consonant with the desire of Maine people and the Maine business community for safe, efficient and a well-run nuclear plant in Wiscasset. We also view the watch list designation as an opportunity for the plant's new operators to work in even closer cooperation with yourselves and your staff to guarantee that Maine Yankee will provide low-cost . 138 electricity and economic stability for Maine into the next

century.

Two paths lie before us in the next 10 years, along one, a vocal minority of nuclear power opponents may succeed in shutting down Maine Yankee prematurely. Our organization is committed to do whatever we can in conjunction with the Maine business community and the majority of Maine citizens to oppose this outcome.

The other path before us leads to a difficult period of increased regulatory scrutiny but emerges in the years ahead with a Maine Yankee facility that leads the nation in the safe and efficient operation of the nuclear facility in Wiscasset. On this path, Maine's investment in Maine Yankee is allowed to fully deliver its returns without any compromise in safety or efficiency.

We believe that people of Maine support Maine Yankee. We believe that this Commission is appropriately engaged in the process of ensuring that operation of Maine Yankee will be among the safest nuclear power plants in America and we look forward to a day when the plant will be removed from the watch list and will continue to produce low-cost power to Maine citizens and Maine businesses for years to come.

Undoubtedly, some opponents of nuclear power will never be satisfied with the safety or continued operation of . 139 the Wiscasset facility. However, Maine's business community and, I believe, the majority of Maine's citizens feel otherwise.

We look forward to supporting this Commission's work with Maine Yankee, Entergy, its new operators, and the more than 500 employees of the facility as you all work together to ensure a safe and secure nuclear energy future for Maine.

I thank you for the opportunity to appear before you today. I thank you for listening. I hope I have conveyed a sense of the importance that Maine Yankee has to the businesses, the people and the economy of Maine and the faith that we have in the problems being able to be fixed and that our future will be secure. And the faith that we have, particularly in listening today, of the ability for all of you to work together to make that happen.

Thank you once again. CHAIRMAN JACKSON: Thank you very much. Commissioner Rogers? COMMISSIONER ROGERS: No questions. CHAIRMAN JACKSON: Commissioner Dicus? COMMISSIONER DICUS: No questions. CHAIRMAN JACKSON: Commissioner Diaz? COMMISSIONER DIAZ: Just a quick comment. I think that it is important that we establish a little more clarity . 140 sometimes when we communicate to the public. I was concerned with slide number two from Mr. Lochbaum in the way that -- CHAIRMAN JACKSON: Do you have any questions? COMMISSIONER DIAZ: I'm sorry. CHAIRMAN JACKSON: So he's not standing there. COMMISSIONER DIAZ: I thought we were finished.

I'm sorry.

CHAIRMAN JACKSON: Okay. Thank you very much. Go on. COMMISSIONER DIAZ: I'm sorry.

I was drawn back to slide number two from

Mr. Lochbaum's presentation. Let me read quickly on it. It says, despite uncorrected and previously undiscovered design problems, the design basis and compensatory measures adequately supported the plant to operate at a power level of 2440 mecawatts.

In the staff presentation in slide number three, it clearly says the staff has concluded that operation is permitted under this order and poses no undue risk to public health and safety. I see there is a problem in here. I think that the staff make a very good, informed decision on an issue, they studied it thoroughly. I don't think anybody has any problems, at least I don't, with the ISAT level of . 141

scrutiny and the way that they look at it.

But when it was presented, it was trying to provide information so detailed that, in doing so, it actually confused the issue. And this statement concludes, operations as permitted under the order poses no undue risk to public health and safety, is what the staff was really concluding and trying to say.

I have tremendous trust in the capability of the American public to catch what is the significant issue. I think we should state clearly what our position is and then whatever additional information is needed to support it. But this dichotomy needs to be, I think, finished. We need to really state it properly.

CHAIRMAN JACKSON: On behalf of the Commission, I would like to thank the licensee, the NRC staff, for briefing the Commission on the status of actions regarding the Maine Yankee plant. This has been a long Commission meeting. In addition, the Commission values the public views and does appreciate the time sacrifice and the comments of those who attended today.

To make sure that your views are thoroughly considered, my understanding is that they are already being addressed, the Commission looks forward to hearing from the staff with respect to any particular safety issues that have been raised in the comments today.

142

As an aside, I met with the governor of Maine last week and he continues to express his interest in matters affecting the Maine Yankee site. We briefly discussed the status of the plant, that it is shut down and requires, under a confirmatory action letter, certain corrective actions prior to restart.

We also discussed the recent addition of Maine Yankee to the NRC's list of facilities requiring increased attention, the watch list.

To Maine Yankee and the NRC staff, you have presented summaries of the root causes, issues and corrective action plans relating to the various deficiencies existing at Maine Yankee and this has helped to clarify the picture for the Commission on how the plant declined to its current level of performance. The Commission will continue to follow closely the regulatory activities and actions related to Maine Yankee. Much work needs to be done by the licensee as well as by the staff in addressing the corrective actions and verifying their acceptability.

cost-cutting measures at the expense of safety considerations. This paper should be out for public comment shortly and the Commission encourages comments.

If none of my fellow commissioners have any additional comments, we are adjourned.

[Whereupon, at 12:59 p.m., the meeting was concluded.]