

ORIGINAL
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON OPERATING REACTORS AND
FUEL FACILITIES - PUBLIC MEETING

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON OPERATING REACTORS AND FUEL FACILITIES

5 ***

6 PUBLIC MEETING

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8
9 Nuclear Regulatory Commission
10 Commission Hearing Room
11 11555 Rockville Pike
12 Rockville, Maryland
13

14 Wednesday, January 29, 1997
15

16 The Commission met in open session, pursuant to
17 notice, at 10:00 a.m., the Honorable SHIRLEY A. JACKSON,
18 Chairman of the Commission, presiding.
19

20 COMMISSIONERS PRESENT:

21 SHIRLEY A. JACKSON, Chairman of the Commission
22 KENNETH C. ROGERS, Member of the Commission
23 GRETA J. DICUS, Member of the Commission
24 NILS J. DIAZ, Member of the Commission
25 EDGAR McGAFFIGAN, JR., Member of the Commission

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1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 JOHN C. HOYLE, Secretary

3 KAREN D. CYR, General Counsel

4 HUGH THOMPSON, JR., Acting EDO

5 CARL PAPERIELLO, Director, NMSS

6 HUBERT MILLER, Region I Administrator

7 LUIS REYS, Region II Administrator

8 BILL BEACH, Region III Administrator

9 JOE CALLAN, Region IV Administrator

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P R O C E E D I N G S

[10:00 a.m.]

CHAIRMAN JACKSON: Good morning, ladies and gentlemen. I am pleased to have the Headquarters staff and the regional administrators here this morning to brief the Commission on the results of the recent NRC senior management review of performance at operating reactors and fuel facilities. The senior management meetings are conducted semi-annually to ensure that the NRC is properly focusing its resources on facilities that need -- that most need regulatory attention based on safety performance and on issues of greatest safety significance.

The Commission would be interested in hearing about steps taken to improve the quality of discussions at the meeting and to enhance the consistency of decisions and if you were able to make progress in these areas.

I understand that copies of the slide presentation are available at the entrance to the meeting room and unless the commissioners have any comments, Mr. Thompson, please proceed.

MR. THOMPSON: Thank you, Chairman Jackson, Commissioners.

With me at the table this morning are Carl Paperiello, who is the director of NMSS; Frank Miraglia, who is the acting director of NRR; Hub Miller, who is the Region

1 I regional administrator; Luis Reyes, who is the regional
2 administrator for Region II; Bill Beach, who is the regional
3 administrator for Region III; and Joe Callan who is the
4 regional administrator for Region IV and will soon be the
5 EDO, and I know he looks forward to that day. Certainly I
6 do.

7 [Laughter.]

8 MR. THOMPSON: As you know, the senior management
9 meeting was initiated in 1986 in response to the loss of the
10 feedwater event at Davis-Bessie, which occurred in June of
11 1985. This meeting was the twenty-second such senior
12 management meeting.

13 Over the past 10 years, the senior management
14 meeting process and the analysis used in support of the
15 meetings and our decisions has evolved.

16 In response to the Commission staff requirement
17 memorandum following the June 1996 briefing on operating
18 reactors and fuel cycle facilities, the staff continued to
19 look at further changes that could be made to improve the
20 basis for judging whether a plant should be based on the
21 watch list.

22 For this meeting, several new initiatives were
23 adopted to strengthen the scrutability of the senior
24 management meeting process, to improve the quality of the
25 discussions and to enhance the consistency and the clarity

1 of the decisions. These steps included placing an increase
2 emphasis on the staff's current assessment of plant safety
3 performance as opposed to licensee plans and projections,
4 modifying the format for the discussion of plant background
5 information focusing on the most significant safety
6 performance issues. Using information summaries or slides
7 is what we used to identify the strongest reasons for and
8 against increased agency attention, particularly for those
9 plants that were being discussed, not those that were on the
10 watch list which we used our watch removal format.

11 Improving the quality and completeness of the
12 record in the senior management meeting discussions so that
13 others who look at the meetings and result of the meetings
14 in the past would be able to understand better what the
15 basis for our decisions were. And, finally, placing
16 increased emphasis on obtaining and integrating the views of
17 each senior manager at the meeting.

18 We early on recognized the importance that we each
19 bring to the senior management meeting, our experience from
20 other regions, our experience from headquarters, and we
21 encouraged full and open discussion by everyone present to
22 present what information they had and to also challenge on
23 the slides the arguments for increased attention as well as
24 those for not taking increased senior management attention.

25 I must admit the success in the latter part about

1 having open discussions kind of exceeded my expectations
2 and, in fact, at this particular meeting we only focused on
3 the operating reactor events and did not have an opportunity
4 to discuss any of the material on fuel cycle facilities and,
5 in fact, we continued the meeting one more day in the
6 afternoon on a Friday after the two-day meeting we had in
7 Region IV.

8 CHAIRMAN JACKSON: What are your plans relative to
9 materials licensing and fuel cycle facilities?

10 MR. THOMPSON: We have not made any specific
11 plans. We did ask Carl at the meeting whether or not he had
12 any unique facilities that needed discussions. He indicated
13 at that time there were none but Carl and I have discussed
14 the need to see whether or not we needed a different format.

15 Obviously, the true focus of these meetings have
16 been on operating reactor and we have had some fuel cycle
17 facility -- fuel cycle facilities in the past that we have
18 discussed and Carl knows that he is able to identify and
19 bring those up. He is also looking at some other approaches
20 to look at those.

21 But I think we will turn to Carl another day, if
22 we can, to give us some suggestions on what processes that
23 we need to do, unless you have anything you want to add
24 today?

25 DR. PAPERIELLO: Other than the fact we have

1 initiated a formal process within NMSS to do plant
2 performance reviews, just as we do on the reactor side for
3 fuel cycles, and we are expanding that to include vendors of
4 dry cast storage systems. So we are -- I think we are
5 behind the curve with respect to NRR but we are looking at
6 doing systematic performance reviews.

7 Frankly, I did it for very selfish reasons, so I
8 could have a view of a particular facility without, you
9 know, coming out of the blue. So we have initiated a formal
10 process for doing that and if a facility looks like the kind
11 of facilities we discuss here, then it would be brought to
12 your attention.

13 CHAIRMAN JACKSON: Okay, when do you expect to
14 begin to implement that?

15 DR. PAPERIELLO: Well, the plant performance
16 reviews for fuel cycle we are already implementing and for
17 vendors of dry cast, we are reviewing that this year.

18 CHAIRMAN JACKSON: Okay, Commissioner Dicus?

19 COMMISSIONER DICUS: Yes, I just wanted to add,
20 based on the Chairman's comment, to pursue and actively
21 pursue reviews of these type facilities and plants in a very
22 timely fashion.

23 CHAIRMAN JACKSON: And in a consistent fashion.

24 DR. PAPERIELLO: Yes, and we do that -- you know,
25 we try to keep the Commission, obviously, informed on

1 particular issues. We have the site decommissioning problem
2 plants and cleanup activity. So we will continue to look at
3 ways to improve that aspect.

4 This senior management meeting resulted in the
5 addition of five stations to the NRC watch list as Category
6 2 facilities. Also, two facilities received trending
7 letters.

8 Before I turn the meeting over to Frank Miraglia
9 and the regional administrators, I would like to highlight a
10 few points. First, because a plant is listed on the watch
11 list does not mean that it is unsafe to operate. If we
12 conclude that a plant cannot safely operate, we will issue
13 orders to shut the plant down in order to ensure adequate
14 protection of the public health and safety. A senior
15 management meeting is not such a forum that would do that.

16 Our objective in placing a plant on the watch list
17 in Category 2 is to identify those plants that have had or
18 are having weaknesses that warrant increased NRC attention
19 from both headquarters and the regional offices.

20 Second, it is apparent that the number of stations
21 on the watch list has increased. I believe that this is due
22 in part to the recent refocus of NRC's attention to the
23 engineering design area. As you know, this area had not
24 been a major focus of NRC's inspection activities since the
25 early '90s and weaknesses in this area contribute directly

1 to the addition of two stations to the watch list.

2 Third, I mentioned earlier that we are trying to
3 enhance the consistency of the decisions made at the senior
4 management meeting. This led to our decision to place Salem
5 on the watch list as a Category 2 facility.

6 Let me be clear. Salem's overall safety
7 performance has not declined since the June 1996 meeting.
8 We believe Salem's efforts to improve its performance are
9 correctly targeted and the NRC is satisfied with their
10 overall approach.

11 This action was taken because Salem was not placed
12 on the watch list at an earlier senior management meeting
13 when, in hind sight, overall safety performance clearly
14 warranted such action.

15 This was the most difficult decision made at this
16 senior management meeting because delay in our action could
17 cause an unintended disruption of the ongoing improvement
18 efforts at both plants. The basis for placing our action
19 has been articulated in our letters to the Public Service
20 Electric and Gas and in our press release, both of which
21 include our support of the current restart efforts at Salem.

22 Hub Miller will address this station in more
23 detail in his remarks.

24 Finally, Bill Beach will discuss in detail the
25 performance of Commonwealth Edison and its Dresden, LaSalle

1 and Zion facilities. Commonwealth Edison is implementing a
2 number of initiatives ensuring the ability to perform
3 independent self-assessment to find their own problems,
4 which is commendable.

5 However, I would like to mention now that because
6 the longstanding performance problems at Commonwealth Edison
7 facilities, which is over the past ten years, four of the
8 six Commonwealth stations have received trending letters or
9 have been on the watch list. I have signed a
10 request-for-information letter, pursuant to 10CFR50.54(f)
11 that requires Commonwealth Edison to provide information
12 that will allow the NRC to determine what actions, if any,
13 should be taken to assure that it can safely operate its six
14 nuclear stations simultaneously while sustaining
15 performance.

16 It is in the best interests of both the NRC and
17 Commonwealth Edison that history does not repeat itself
18 anymore and we are committed to work with Commonwealth to
19 address this issue head on.

20 I will now ask Frank Miraglia to begin the formal
21 presentation.

22 MR. MIRAGLIA: Thank you, Hugh.

23 Good morning, Madam Chairman, Commissioners.

24 As has been covered, the senior management meeting
25 has two principal objectives as it relates to nuclear power

1 plant performance. The first is to identify problem
2 performance and adverse trends before they realize
3 themselves in actual safety events.

4 And as noted by the Chairman, we are overseeing
5 reactor safety. An integrated review is conducted of plant
6 safety performance at these meetings by considering the
7 objective information, such as the plant specific inspection
8 results, operating experience, probabilistic risk insights,
9 systematic assessment of licensee performance, performance
10 indicators and enforcement history.

11 Special attention is given to licensees'
12 self-assessments and the effectiveness of corrective actions
13 taken for problems identified by licensees.

14 Our objective is to identify facilities early that
15 have negative performance trends or those facilities whose
16 performance requires agency-wide close monitoring and
17 oversight.

18 We also discuss plant inspection activities, NRC
19 management oversight and resources for individual plants
20 discussed.

21 I will summarize the overall results of this
22 recent senior management meeting, after which the regional
23 administrators will discuss facilities that have been
24 categorized as needing agency-wide attention or where we
25 have taken action as a result of the senior management

1 meeting.

2 May I have Slide 2, please.

3 Category 1 is a list of those plants that are
4 removed from the NRC Watch List. No plants were removed
5 from the list during the January, 1997 senior management
6 meeting.

7 Slide 3.

8 COMMISSIONER ROGERS: Excuse me, just before you
9 leave that, the Staff sent up to the Commission in May a
10 SECY 96-093. It described a couple of techniques or tools
11 that would be used at the senior management meeting.

12 One of them was the Plant Performance Evaluation
13 Template. The other one was the Watch List Removal Matrix.

14 I wonder if you could say anything about how you
15 used those in any of your decisions.

16 MR. MIRAGLIA: Yes. With respect to the latter,
17 the removal matrix, that was used for the plants that had
18 already been designated as Watch List plants to determine
19 whether there was sufficient progress to have them removed
20 from the list and such matrices were used for Dresden,
21 Indian Point.

22 COMMISSIONER ROGERS: So it was used?

23 MR. MIRAGLIA: Yes. We have also used it in a
24 unique way for Salem in the context of, as Mr. Thompson has
25 explained, in hindsight Salem perhaps should have been on

1 the list earlier and, given that, we said in the decision to
2 put Salem on the list we should look at those attributes to
3 determine whether sufficient progress had been made such
4 that they would have been removed from the list.

5 The result of that evaluation was we couldn't
6 conclude that they met that Watch Removal List criteria.

7 In terms of the former, in terms of the template,
8 those elements are looked at. In the discussion of the
9 plants the performance indicators, the events at the
10 plants --

11 COMMISSIONER ROGERS: Well, I know the template
12 does involve a lot of things that you have looked at in the
13 past.

14 MR. MIRAGLIA: Yes.

15 COMMISSIONER ROGERS: Let me ask another question,
16 whether you used it in a systematic way.

17 MR. MIRAGLIA: I think what we tried to do in
18 terms of the Plant Issue Matrix is try to integrate those
19 kinds of things and bring those higher points from the
20 screening meeting to be discussed in the meeting.

21 We are still working on that matrix, need more
22 time to get that into a more systematic process.

23 The removal matrix we had been using for a longer
24 time and it has more discipline and more consistency. We
25 did attempt to use it but I don't think it had the degree of

1 formality where we are.

2 CHAIRMAN JACKSON: Mr. Thompson, did you have a
3 follow-on comment?

4 MR. THOMPSON: No. I think Frank covered that.

5 MR. MIRAGLIA: With respect to the Category 2
6 facility, that's Slide 3, the Category 2 facilities are
7 those whose operation is closely monitored by the NRC.
8 These facilities include Indian Point, Maine Yankee, Salem I
9 and II, Crystal River, Dresden II and III, Lasalle I and II,
10 and Zion I and II.

11 Indian Point III and Dresden II and III were
12 previously designated as Category 2 sites.

13 The four additional sites -- Maine Yankee, Salem I
14 and II, Crystal River, Lasalle, and Zion, were added, and it
15 was special circumstances with respect to Salem's addition
16 as discussed by Mr. Thompson.

17 Slide 4.

18 COMMISSIONER DICUS: I have a couple of questions
19 on the slide before you go forward, and I am trying to
20 understand why the Category 2 list has essentially more than
21 doubled, because I think that is a very critical point.

22 I may have to go back to some opening statements
23 that Mr. Thompson made in trying to understand this a little
24 clearer.

25 I think you indicated in your opening statement

1 tha* in this particular senior management meeting you did
2 change or modify how you looked at the plants or the format
3 that you used.

4 Could you clarify that statement?

5 MR. THOMPSON: Yes. We had as part of the effort
6 to improve the senior management process -- we hired an
7 independent consultant who looked at the process,
8 interviewed many of the senior management that had
9 participated in the process, interviewed some of the
10 industry, and looked -- and identified and made some
11 suggested changes that we should consider.

12 The one that we were able to look at in the
13 timeframe that we had available, the criticism was that the
14 previous senior management meeting had to some extent been
15 dominated by the regional administrators, not because of
16 inappropriate aspects -- because they are the ones
17 responsible for the plant -- but because they had such a
18 detailed knowledge and their knowledge was almost
19 overpowering everybody else's knowledge at the meetings.

20 So what we elected to do was have that detailed
21 knowledge to put the arguments both for increased agency
22 attention as well as not having increased agency attention.

23 That is, have the individual who knows the most present the
24 argument on both sides of the issues. I think that was the
25 key element or the key critical element that we did in

1 addition to having all the managers who then had experience,
2 had similar experience with similar plants, who may have
3 even had experience with those plants challenge the regional
4 administrators on those issues, on his articulation, and did
5 they withstand the scrutiny that the senior managers brought
6 to those issues, and that in essence led to, as I said
7 earlier, a much more vigorous discussion on the plants that
8 we had and in essence was one of the changes.

9 I think just the information was better. I think
10 the reasons I articulated here with our new focus of the
11 design engineering aspects as well as the decision we made
12 with respect to Salem with respect to consistency and
13 scrutability, understandability of the approach contributed
14 to the addition of three of those new facilities.

15 Zion and Lasalle, obviously you'll hear the
16 specifics with those later on.

17 COMMISSIONER DICUS: Okay. Then the report you're
18 referring to is the Arthur Andersen consultant?

19 MR. THOMPSON: That's correct.

20 COMMISSIONER DICUS: I guess I was under the
21 impression from a conversation that you and I had had a few
22 days ago that the Arthur Andersen report really had not been
23 used, or any part of it. So I'm hearing now that a part of
24 it, perhaps, was used or was a guidance.

25 MR. THOMPSON: The Arthur Andersen recommendations

1 were not used. We looked at the comments or the conclusion
2 of the Arthur Andersen study as it relates to the regional
3 administrators having the predominant knowledge that was
4 available and the approach outlined by Arthur Andersen was
5 not used, the information in the Arthur Andersen report was
6 not used in making any decisions.

7 What we did elect to do is to have the regional
8 administrators articulate both sides of the arguments that
9 we would have to make a decision on, which was not part of
10 the Arthur Andersen recommendation. That was one that we
11 looked at the Arthur Andersen, noting that we could improve
12 our decision-making process by providing the broadest amount
13 of information to the senior managers there and that was the
14 change that we made. It had a slight nexus, but it was not
15 using the approach recommended by the Arthur Andersen
16 approach.

17 COMMISSIONER DICUS: Right. Just a quick comment
18 and I'll move on.

19 I'm in the process still of reading and studying
20 the Arthur Andersen report which seems to have some value,
21 but I think if we're going to use this report or we're going
22 to perhaps change the way plants are evaluated, that
23 probably is a -- I see that as a policy decision that the
24 Commission needs to make and then give the directive.

25 MR. THOMPSON: Absolutely. We still used our

1 category criteria for making our decisions and what we tried
2 to elicit was the best information that we could have
3 amongst all the senior managers in having a full and frank
4 dialogue in reaching those decisions.

5 It was the full and frank dialogue and exchange of
6 information that we had that was improving the process we
7 had in place. We've always had the ability to articulate
8 the views of the directors of NRR, other people there,
9 Office Enforcement, Office Investigation, whoever was there.

10 This just was a mechanism which facilitated that
11 exchange of information that we've had in the past.

12 COMMISSIONER DIAZ: Madam Chairman?

13 CHAIRMAN JACKSON: Go ahead.

14 MR. CALLAN: Let me just make the quick comment.
15 As a practical matter, Commissioner, we had the Arthur
16 Andersen report only a few weeks before the senior
17 management meeting. The regional administrators and
18 regional staff had pretty much put together the briefing
19 sheets. We were in a position where we really, as a
20 practical matter, couldn't implement the Arthur Andersen --
21 even if we had wanted to, so we elected to make some
22 adjustments as Hugh Thompson mentioned, that were doable in
23 a very short period of time, very modest in terms of
24 structure, modest adjustments.

25 CHAIRMAN JACKSON: But you did not use the Arthur

1 Andersen performance indicators in making your judgments, is
2 that what you're telling us?

3 MR. THOMPSON: That is it. We did not use them.
4 In fairness, the slides were put up there simply as a matter
5 of observation, but they were not used by any one judgment,
6 no one used the Arthur Andersen slides because I think we
7 also said that information, that technology for those slides
8 was premature, had not been fully evaluated, had not
9 received peer review and we have had previous experience
10 with trying to use performance indicators that had not been
11 ripe and had not been thoroughly evaluated and reviewed. So
12 we did not use that.

13 The real benefit from the Arthur Andersen we were
14 able to implement was to ensure that all participants felt
15 free to comment, to discuss, to provide their inputs into
16 the meeting as well as to request the regional
17 administrators to really present both sides of an argument
18 that we could then have the ability to reflect on as we made
19 the decision based on the criteria that we presently had.

20 CHAIRMAN JACKSON: Commissioner Diaz?

21 COMMISSIONER DIAZ: Yes. Going back to your
22 statement that in this senior management meeting, there was
23 significant discussion and challenge to the regional
24 administrators and I think that was a wonderful process, if
25 you look at the position of the regional administrators say

1 before the discussion and the challenges, was any of the
2 decisions changed or the discussion just supported the
3 decision of the regional administrators?

4 CHAIRMAN JACKSON: Perhaps there's a way we could
5 address that question. Are we going to hear from each of
6 the regional administrators?

7 MR. THOMPSON: We will hear from them, yes.

8 CHAIRMAN JACKSON: Well, perhaps each one of them
9 could speak to that.

10 COMMISSIONER DIAZ: No, I think this is a generic
11 process and the question is very clear. The regional
12 administrators, each one has a position documented because
13 they know the plants better. You discussed them, challenged
14 them. Was, in any one case, that position changed by your
15 discussion?

16 MR. THOMPSON: The position is not articulated up
17 front, Commissioner Diaz. What is done, in the cases, we
18 discussed the plant, discussed performance issues, and we
19 hear all of the plants as an aggregate set, reflect over the
20 evening, and then we come back the next day and say, based
21 on what we've heard, where are we with respect to the
22 categorization of these facilities.

23 What was done in this case is exactly what was
24 done in most of the other senior management -- in fact, all
25 of the senior management meetings that I've attended where

1 the facts are presented and the difference, in this case, is
2 the regional administrators say, here is issues based upon
3 the performance in the last six months that would indicate
4 or warrant increased agency attention or indicate adverse
5 performance that we need to consider, action within the
6 content, here's the facts that would argue and so both sides
7 of the issues were presented in that way.

8 So if any of the issues changed is a difficult
9 question to answer because it wasn't presented that way.
10 Those decisions were made the following day.

11 COMMISSIONER DIAZ: Then I would defer to Madam
12 Chairman's comment which seems to be very appropriate that
13 then the regional administrators might illustrate how
14 effective the process is, if it's actually helped them,
15 changed their decision, or the fact that they already are so
16 much more knowledgeable than anybody else, they were able to
17 maintain and support the position they have taken prior to
18 the meeting.

19 CHAIRMAN JACKSON: I think that's what we can do
20 as we go through.

21 MR. THOMPSON: Frank has some more things.

22 MR. MIRAGLIA: With respect to Category III
23 facilities, Slide 4, Category III facilities are the last to
24 shutdown and require Commission authorization to operate,
25 that the staff monitors closely.

1 Millstone I, II and II remain in Category II.

2 Subsequent to the last meeting, the Commission meeting on
3 the senior management meeting results, those plants were
4 categorized as Category III plants.

5 As the Commission is aware, we have a meeting
6 tomorrow on Millstone at 10:00 a.m. Northeast Utilities
7 will be here to give status. Dr. Travers and the SPO staff
8 will also be giving a staff presentation and we won't be
9 discussing the Millstone units in any detail with respect to
10 the rest of the senior management meeting and we'll handle
11 that tomorrow. Slide 5, please.

12 The following plants requiring trending letters
13 were identified at the senior management meeting and that
14 was Clinton and Point Beach I and II. Slide 6.

15 Hope Creek was issued a letter. At this recent
16 meeting the senior managers concluded that the licensee had
17 reversed the adverse performance trend at Hope Creek. Such a
18 letter will be sent indicating that.

19 Slide 7 has already been covered by Mr. Thompson.
20 There were no priority material issues identified. In
21 fact, there was no real discussion of material facilities at
22 that.

23 Hub Miller will discuss Indian Point III, Maine
24 Yankee, Salem and Hope Creek, Luis Reyes will discuss
25 Crystal River and Bill Beach will discuss Dresden, Lasalle,

1 Zion, Clinton and Point Beach.

2 At this point I'll turn the discussion over to Hub
3 Miller for --

4 COMMISSIONER ROGERS: Just before we move off, I
5 have one question, just a general question on our policy
6 with respect to trending letters.

7 Once a trending letter is issued and there has not
8 been a correction of adverse trend letter issued, there
9 could be some period of time there. Several SM meetings
10 could take place, so is it clear that that initial trending
11 letter still is in effect in a certain sense?

12 In other words, until we issue a correction, an
13 acknowledgement of a correction of adverse trends, we don't
14 issue anything each time we have a senior management meeting
15 if a plant has received a trending letter and hasn't
16 received a correction of adverse trend letter, is that the
17 process?

18 MR. MIRAGLIA: That's what the process is and then
19 with respect to the results of that, the results of the last
20 meeting where Hope Creek didn't receive a letter the
21 regional administrator would indicate that Hope Creek was
22 discussed and that no action was taken, and that's the
23 judgment that the trend hasn't been abated, so that is the
24 process and the policy, and that is articulated within the
25 context of the draft management directives and some of those

1 that are out right now, sir.

2 COMMISSIONER ROGERS: It does seem to me that
3 there is a little gap there in a certain sense that when we
4 issue a trending letter and then the licensee takes some
5 corrective action but it isn't enough to cause us to issue a
6 correction of adverse trend letter.

7 There is nothing on the record that indicates some
8 acknowledgement at least out of the senior management
9 meeting. Now maybe it isn't necessary but it does look to
10 me like there's a sort of disconnect until we reconnect with
11 the issuance of a correction of adverse trend.

12 MR. MIRAGLIA: We, in fact I think early on, we
13 were using the process where we tried to issue something at
14 the end of each meeting and many times it's -- the period
15 wasn't soon enough.

16 COMMISSIONER ROGERS: Yes. I am not questioning
17 your decision. I am just questioning the process that
18 simply leaves it unaddressed.

19 There was a senior management meeting, the letter
20 came out --

21 MR. MIRAGLIA: We will be re-examining the senior
22 management process I think as we all know, and certainly I
23 think that would be one element that we would --

24 COMMISSIONER ROGERS: Well, I would suggest you
25 take a look at that.

1 MR. MIRAGLIA: We certainly will.

2 COMMISSIONER ROGERS: Because it does seem to me
3 there's a little bit of a gap in the process.

4 MR. MIRAGLIA: We'll address that and have a
5 recommendation to the Commission on that.

6 CHAIRMAN JACKSON: Commissioner?

7 COMMISSIONER MCGAFFIGAN: I am going to ask, are
8 you going to mention the superior performer letters at any
9 point, the little bit of good news that comes out of this?
10 Could you also explain the process to me whereby you decide
11 who gets a superior performer letter?

12 MR. MIRAGLIA: Yes. The management directive
13 indicates what is the criteria for consideration for
14 superior performance, the management directive paper that
15 Commissioner Rogers referred to, and it's essentially what's
16 the performance evaluation in terms of SALP being Category 1
17 in the major SALP areas not having significant enforcement
18 actions for a period of time, and if it meets that criteria
19 the judgment is that it is a candidate for receiving such
20 recognition.

21 The policy has been changed over time with the
22 Commission and the current policy is that plants, since the
23 last senior management meeting, that meet that criteria are
24 discussed, saying that it meets the criteria and such a
25 letter should be sent, and that is sent subsequent to the

1 management meeting. It is usually a two-week period.

2 CHAIRMAN JACKSON: I think the Commission would
3 like you to say who got such letters this time.

4 COMMISSIONER MCGAFFIGAN: Is it fair to --

5 MR. MIRAGLIA: Yes. It was Harris facility and
6 Turkey Point facility that received such recognition -- will
7 receive. They have not been notified yet -- but the policy
8 would be such notification would be two weeks subsequent to
9 this meeting.

10 The previous guidance from the Commission was to
11 focus --

12 COMMISSIONER MCGAFFIGAN: I'm sorry --

13 MR. MIRAGLIA: -- on this, but we can revisit that
14 issue also.

15 COMMISSIONER MCGAFFIGAN: We'll revisit that too.

16 CHAIRMAN JACKSON: Please go on.

17 MR. THOMPSON: Mr. Miller?

18 MR. MILLER: Let me first of all address the
19 question -- I went into this meeting with an open mind. I
20 had no hard held view.

21 The modifications that were talked about were
22 characterized as modest and simple, but while they were
23 modest and simple, I think it was a significant improvement
24 in terms of having before all of the senior managers those
25 arguments that are most compelling for taking increased

1 action and those arguments that are most compelling for not.

2 So my job as regional administrator was to,
3 knowing what I know about the plants, was to feel
4 responsible for assuring that the facts are known to all of
5 the senior managers, and also do a good job of presenting
6 arguments on both sides, and I think it did facilitate
7 discussion.

8 As you said, the discussions were longer than
9 normal, so to answer your question I had no hard view before
10 the meeting and I honestly looked for the discussion to draw
11 conclusions and I am happy, very happy, with the process.

12 I think it did provide what we are all looking
13 for, which is greater consistency plant to plant, meeting to
14 meeting, and great scrutability of our results.

15 With that, let me first talk about Indian Point
16 III.

17 Indian Point III was first placed on the Watch
18 List as a Category 2 plant in June of 1993. At that time
19 the plant was shut down to deal with a number of technical
20 and staff performance issues.

21 Governed by a confirmatory action letter, the New
22 York Power Authority conducted an outage lasting about two
23 years.

24 Following restart in June of 1995, the plant
25 operated for only a short period of time before equipment

1 problems and some significant personnel errors again caused
2 the Power Authority to shut the unit down for an extended
3 outage.

4 The outage lasted about six months.

5 Over the period from June, 1993 to early 1996,
6 numerous management changes were made at both corporate and
7 site levels as the licensee attempted to address performance
8 problems.

9 Since starting up in April, 1996, the plant has
10 operated at power nearly continuously. During this time the
11 senior management team has been relatively stable and has
12 provided strong oversight of plant evolutions and major
13 maintenance activities.

14 A generally conservative approach to plant
15 operations has been taken. Improvements noted in the last
16 senior management meeting, communications and the conduct of
17 control room activities have continued. Overall, the number
18 and significance of personnel errors at the station has
19 declined but some human performance problems remain,
20 particularly in the area of work control.

21 Work control errors, for example, led to
22 inoperability of an auxiliary feedwater pump on one occasion
23 and a plant transient on another.

24 Maintenance activities generally have been
25 performed well and corrective maintenance backlogs reduced

1 significantly over the past six months. While overall
2 improvement in plant material condition has been observed,
3 equipment problems continue to challenge operations. These
4 problems, the majority of which originated in the balance of
5 plant, resulted in a number of plant transient shutdowns and
6 power reductions.

7 Emergent work continued to hamper progress in
8 reducing engineering backlogs which have been large and
9 making needed improvements in areas such as safety
10 evaluations, operability determinations, set point control
11 and updating and validating design basis documents.

12 Recently, efforts have been made to better
13 understand and prioritize outstanding engineering work.
14 Steps have been taken to refocus attention on problem areas
15 administration resources have been added, but it is too
16 early to judge results in the engineering area.

17 Currently, the plant is in a forced outage to
18 repair feedwater heater tube links. The station is using
19 this outage to address a number of equipment issues such as
20 replacement of leaking pressurizer power operated relief
21 valves that have been longstanding operator work-arounds.

22 The power authority is developing plans to address
23 many of the remaining equipment issues in their refueling
24 outage scheduled to begin in a couple of months.
25 Determining whether the station has made necessary lasting

1 improvements will require an additional period of
2 monitoring. This includes at least assessment of the outage
3 scope and its preparations. It also includes the monitoring
4 of operations and work control during some portion of the
5 refueling outage. The last time the plant was refueled was
6 in 1992 with the extended outages.

7 In conclusion, after considering the evaluation
8 factors for removal of a plant from the watch list, senior
9 managers concluded that Indian Point 3 should remain on the
10 watch list as a Category 2 facility; that is, a plant
11 warranting increased attention from both headquarters and
12 regional offices.

13 CHAIRMAN JACKSON: Did you, in fact, use the watch
14 list removal factors in helping making your determination?

15 MR. MILLER: Yes, ma'am. That was developed
16 before the meeting and that was also the subject of great
17 discussion in the meeting, very definitely.

18 CHAIRMAN JACKSON: Any questions?

19 [No response.]

20 MR. MILLER: Next, I will talk about Maine Yankee.

21 This was the first time that Maine Yankee was
22 discussed at a senior management meeting. Over the past
23 year, a number of significant deficiencies at the facility
24 came to light. Agency understanding of these deficiencies
25 was developed largely by an independent assessment team

1 which conducted a review during the latter half of 1996.

2 Strengths were noted in some aspects of
3 operations, such as handling of routine and transient
4 operating conditions and shift turnovers. The independent
5 team found station staff to be knowledgeable.

6 As the independent review was initiated in
7 response to problems which had come to light regarding use
8 of computer codes, the broad spectrum of analytical codes
9 used at the facilities were examined and the team found a
10 mixed picture. Frequently used codes were excellent but
11 weaknesses were found in others.

12 More broadly, the independent assessment team
13 discovered a number of significant design issues. The
14 capability of several safety systems was called into
15 question, particularly for operational power levels above
16 2440 megawatts thermal.

17 Coupled with requests about design margins on some
18 systems were significant weaknesses in the testing of plant
19 equipment and material condition deficiencies. These
20 problems revealed broader weaknesses in the area of
21 engineering support, which is provided by the combination of
22 Maine Yankee and Yankee Atomic Electric Company staffs.

23 More fundamentally, the independent team
24 determined that the weaknesses and deficiencies that exist
25 appeared to relate to two root causes: Economic pressures

1 to contain costs and poor problem identification as a result
2 of complacency and a lack of a questioning attitude.

3 Since completion of the independent safety
4 assessment, additional examples of design issues have been
5 identified by Maine Yankee in following up on the
6 independent safety team findings. Configuration problems
7 have been identified. Failure to provide adequate cable
8 separation on several systems, for example, were found in
9 December, resulting in a shutdown of the facility. An NRC
10 confirmatory action letter was issued at that time,
11 stipulating actions required prior to startup.

12 Maine Yankee has developed a plan and initiated
13 steps to correct the problems. These include committing
14 additional funds and hiring of new staff, principally in
15 engineering, maintenance and radiological controls. An
16 agreement is under development with Entergy Corporation to
17 obtain outside management expertise in operation of the
18 facility. This plan is the plan that was submitted on
19 December 10 and the company will be meeting with the
20 Commission on February 4, which is next week, to review the
21 plan.

22 Much remains to be done, however. The senior
23 managers determined that increased agency attention is
24 needed to monitor improvement efforts. As a consequence,
25 Maine Yankee has been designated as a Category 2 watch list

1 facility.

2 CHAIRMAN JACKSON: I have a question for you.

3 If Maine Yankee had previously been viewed as a
4 good performer and, in a certain sense, you've essentially
5 said that the recent focused inspection, and particularly
6 the independent safety assessment, were the things that
7 uncovered problems that suggested that this plant warranted
8 increased agency attention.

9 What does this say in terms of the ability in the
10 normal course of things to uncover these problems or, put
11 another way, what assurances do we have that we are not
12 missing them somewhere else and is it suggesting any
13 renormalizations in our regular inspection program that
14 needs to exist because it seems that most of what you
15 considered within the context of the factors that would make
16 you designate it a Category 2 plant were uncovered in a
17 special way. So if you could speak to that?

18 MR. MILLER: Two things. It perhaps is
19 oversimplifying it to say that it was design alone that
20 caused this categorization. It was really a combination of
21 things. It was the coupling of a lack of the questioning
22 attitude and the design issues that caused the senior
23 managers to make this judgment.

24 But, as you know, we are looking at -- and others
25 might speak to this -- at ways to be able to take deeper

1 looks at design and in fact we've assembled resources
2 through a contractor to permit the staff to do more what are
3 called vertical slice inspections, which get you into the
4 details of design, design function.

5 We are limited as to how many of those we can do,
6 honestly, but we are on a course of performing these
7 inspections virtually at all plants in a sequence that is
8 informed by risk and other things that we know about plants,
9 picking targets that are most vulnerable first, and we are
10 proceeding to do that.

11 Frank, do you want to --

12 MR. MIRAGLIA: Yes, I would like to address it
13 perhaps in a broader context. In terms of Maine Yankee
14 specifically, as the Commission is well aware, there was the
15 concern raised by the allegations that there were concerns
16 relative to Maine Yankee's performance developing that led
17 to the audit. In a concurrent time frame, the issues that
18 were growing from Millstone, Haddam Neck, et cetera,
19 experience were ongoing and we were looking at and
20 identified concerns in the design area.

21 We had been looking at ways of enhancing our
22 inspection program to do vertical slice and to incorporate
23 more of the SSFI type, safety system function inspection, to
24 look into the design area. We have taken steps on that.

25 As Hub indicated, subsequent to the senior

1 management meeting last June, we have engaged architectural
2 engineering services to do those vertical slice inspections,
3 to probe in that type of area. In addition, we have issued,
4 because of the design weaknesses that have been identified
5 in several of the facilities, we have issued a 50.54(f)
6 letter to all the utilities other than the Northeast
7 Utilities, since they were already under a 50.54(f) letter,
8 to explain and to state the bases why design control and
9 configuration management of the plant is being maintained,
10 what programs do they have and how do they have confidence
11 that they have those kinds of issues.

12 The special inspection team, the special
13 inspection team, grew out of concerns from the allegations
14 and that focus and we've incorporated in that inspection
15 team that vertical slice element, so I think we are building
16 off of the experience we have gained not only through Maine
17 Yankee but at other facilities and the program is being
18 redirected in that kind of area and we are gaining
19 information to say how can we use our resources most
20 effectively and use the 50.54(f) responses on design control
21 and focus the appropriate level of inspection on facilities
22 using that kind of information.

23 So I think the program is being redirected.

24 CHAIRMAN JACKSON: Mr. Callan?

25 MR. CALLAN: Chairman, I just did want to mention

1 one important insight that came out of the Maine Yankee
2 experience that is being addressed. I think the Commission
3 will shortly be getting a Commission paper describing Phase
4 II of our lessons learned.

5 But one of the important lessons learned from
6 Maine Yankee is the need to more closely couple the
7 inspection process with the licensing process. That is in
8 addition to the design and the engineering issues that were
9 previously discussed.

10 MR. MIRAGLIA: The scope of the issues that were
11 considering improvements are even broader as Mr. Callan was
12 articulating. Those that we have actually taken and
13 implemented to date, there are further improvements that are
14 being looked at and the Commission will be hearing those in
15 the future.

16 CHAIRMAN JACKSON: Are there any questions?

17 [No response.]

18 MR. MILLER: Okay, Salem.

19 Hugh has already mentioned that the action taken
20 here was not a reflection of current performance but more a
21 different perspective on previous decisions made on the
22 facility.

23 Since Salem was first discussed during senior
24 management meetings in 1990 and 1991, after a period of some
25 improvement, performance problems surfaced again leading to

1 discussion of the plant at the June 1994 senior management
2 meeting.

3 The event that best illustrated these problems
4 involved a significant plant transient which occurred in
5 April 1994. The event which was initiated by sea grass
6 intrusion on cooling systems resulted in a reactor trip,
7 safety injection and failure of numerous plant components
8 which significantly complicated operator response. The
9 transient revealed numerous equipment problems and operator
10 work-arounds.

11 The licensee was required to review the event and
12 actions being taken to address underlying problems directly
13 with the Commission in a meeting held in July 1994.

14 Continuing performance problems led senior
15 managers to conclude in the January 1995 senior management
16 meeting that agency concerns needed to be brought directly
17 to the Board of Directors of Public Service Gas and Electric
18 in a meeting. This occurred in March of 1995.

19 Subsequently, additional equipment operability
20 problems led to technical specification required shutdown of
21 Units 1 and 2 in April and May of 1995 respectively. Given
22 the breadth of both the human performance and equipment
23 problems that were coming to light at this time, the
24 licensee expanded significantly the scope of its improvement
25 efforts. Extensive senior management changes were made in

1 the summer of 1995.

2 Following decisions by new management to initiate
3 retraining of station staff and to undertake major
4 refurbishment of plant equipment in an extended outage, an
5 NRC confirmatory action letter was issued in June 1995
6 establishing actions required before restart of the units.

7 In monitoring activities at the site since that
8 time, since the shutdown, we have observed the current
9 management team that the licensee has assembled to be a
10 strong one. There have been changes but the team has been
11 relatively stable and in place for most of the outage.

12 A much lower problem reporting threshold has been
13 established and management has been aggressive in addressing
14 root causes. Significant staffing changes have been made.
15 Operations and maintenance staffs have now completed
16 extensive training and requalification programs to both
17 reinforce fundamental skills and establish higher safety
18 standards. Steps have been taken to strengthen station
19 self-assessment, corrective action and work control
20 processes.

21 As a result, the number and significance of
22 personnel errors have declined. Operators have demonstrated
23 improved ownership of the plant and conservative
24 decisionmaking.

25 The outage scope has been extensive for both

1 plants. Numerous components have been refurbished or
2 replaced with more reliable equipment in both safety-related
3 and balance-of-plant systems. More than 400 modifications
4 have been made.

5 These include major modifications or upgrades to
6 diesel generators, service water and component cooling water
7 systems and the control room. A digital feedwater control
8 system is being installed and approximately 800 Hagen
9 instrument modules used in various control and protection
10 functions are being replaced. This effort is significant
11 because these Hagen modules were the source of numerous
12 operator work-arounds before the shutdown. Steam generators
13 are being replaced on Unit 1.

14 A comprehensive pre-startup test program is under
15 way on Unit 2 to assure repair work has been effective.
16 Engineering organizations are providing stronger support on
17 equipment and design issues as evidenced by completion of a
18 recent licensing basis conformance review.

19 The senior managers thoroughly discussed current
20 activities at Salem and the basis for past senior management
21 meeting decisions. The conclusion was that the scope and
22 depth of the problems that existed at Salem prior to the
23 dual unit outage, prior to management changes made largely
24 in 1995, warranted categorizing it as a Category 2 facility
25 indicating need for increased NRC attention. Past decisions

1 regarding Salem's status were influenced by current licensee
2 management's recognition of problems and efforts being made
3 to address them.

4 As a practical matter, however, given the extent
5 of these problems and the scope of activities, the agency
6 increased its attention to Salem to a level commensurate
7 with that given a plant in a Category 2 status. As a
8 consequence, senior managers reviewed Salem performance
9 using the category 2 evaluation -- the evaluation factors
10 for removal of a plant from the watch list.

11 Managers concluded, notwithstanding significant
12 steps being taken and results achieved to date, Salem would
13 not be removed from Category 2 status if it had been
14 previously categorized as such. A key consideration in the
15 watch list removal evaluation factors is assessment of plant
16 and integrated station performance at power, which is yet to
17 occur.

18 The licensee is nearing the end of its outage on
19 Unit 2. Startup is now scheduled to occur sometime in the
20 next couple of months. As explained in the January 2 staff
21 paper submitted to the Commission on Salem restart
22 activities, the staff has completed or will complete
23 extensive inspections in the design, engineering and testing
24 areas before restart. Consistent with guidelines contained
25 in NRC Manual Chapter 0350 governing agencywide activities

1 and special plant restart situations like Salem, an
2 independent readiness assessment team will conduct a final
3 review of operational readiness before restart of the unit
4 is authorized.

5 In summary, decision was made to recognize Salem
6 should have been placed on the watch list previously and
7 that it would not have been removed at this point. As such,
8 Salem is being classified as a Category 2 facility.

9 Again, as we mentioned at the beginning, this is
10 not intended to suggest that we are dissatisfied with the
11 approach being taken or to imply that the improvements that
12 are being taken are incorrectly targeted.

13 CHAIRMAN JACKSON: Questions?

14 [No response.]

15 MR. MILLER: Hope Creek.

16 The Hope Creek generating station was first
17 discussed at the January 1996 senior management meeting. At
18 that meeting, senior managers reviewed a number of events
19 that revealed declining performance at the station. A
20 decision was made to send a letter advising Public Service
21 Electric and Gas of the negative trend and requesting a
22 meeting of top level officials to discuss NRC concerns.

23 Steps taken by licensee management since that
24 meeting to address both human performance and equipment
25 issues have resulted in overall improvement in plant

1 operations. Management has consistently exhibited a
2 conservative approach to decisionmaking. Progress has been
3 made in communicating higher performance and lowering
4 significantly the threshold for identification of problems.

5 Numerous staffing changes and an extensive
6 training and requalification initiative have led to improved
7 control and plant activities by operators and this is
8 significant because the negative trend discussed in the
9 January 1996 letter is most notably evidenced by several
10 significant events that -- where operators failed to
11 properly control plant evolutions.

12 Overall personnel error rates have declined
13 significantly. The station is well along in addressing
14 previously identified problems with technical specification
15 and surveillance procedure discrepancies. Overall material
16 condition of the plant is good as illustrated by improved
17 plant operating performance.

18 This improvement stemmed, to a large degree, to
19 work accomplished during an extended outage completed in
20 early 1996. Maintenance and engineering backlogs, which are
21 somewhat large, constitute a continuing challenge to the
22 station but they are well understood and prioritized.

23 Continuing attention is also needed to improve
24 operator staffing levels which were reduced somewhat during
25 the station's operator requalification initiatives.

1 In summary, senior managers determined that Public
2 Service Electric and Gas has arrested the decline in
3 performance at Hope Creek station. The company has been so
4 notified in our letter summarizing senior management meeting
5 decisions.

6 CHAIRMAN JACKSON: Questions?

7 [No response.]

8 MR. THOMPSON: We will go to Luis Reyes of Region
9 II.

10 CHAIRMAN JACKSON: You don't plan to say anything
11 about Millstone because we're having a separate meeting; is
12 that the point?

13 MR. THOMPSON: That's correct, Madam Chairman.

14 CHAIRMAN JACKSON: All right.

15 Any questions? If not --

16 MR. REYES: Madam Chairman, Commissioners, I will
17 be addressing the senior managers meeting review of Crystal
18 River.

19 Crystal is a single BLW unit operated by Florida
20 Power Corporation. Declining performance at Crystal River
21 was first discussed during the June 1996 senior management
22 meeting. Performance concerns at Crystal River discussed at
23 this senior management meeting involve Florida Power
24 Corporation mishandling of several design issues, improper
25 interpretation of NRC regulations and weaknesses in operator

1 performance, corrective actions and management oversight.

2 As a result of the licensee's performance, a
3 series of bimonthly management meetings were conducted
4 between the regional administrator and the senior managers
5 from the region and FPC's chief nuclear officer and key
6 Crystal River site managers. These meetings were conducted
7 to review the licensee's progress in implementing corrective
8 actions.

9 Overall performance at the facility has continued
10 to decline from the previous assessment period, as
11 documented in the most recent SALP issued on November 25,
12 1996. Several level three violations were issued since the
13 last senior managers' meeting which included significant
14 civil penalties.

15 Modifications made to the plant during the April
16 1996 refueling outage created on review a safety question
17 regarding emergency diesel generator loading and introduced
18 additional failure modes in the emergency feedwater system.

19 The significant issues, engineering reviews and
20 modifications required resulted in the licensee's decision
21 to shut down Crystal River in September of 1996 and to
22 maintain the unit in shutdown for an extended period of time
23 to ensure safety system operability and to increase design
24 margins. This action was taken as a recognition by the
25 licensee that Crystal River may have operated outside its

1 design basis and that other systems could also be impacted
2 by the recent engineering issues.

3 The licensee has submitted to the NRC a management
4 corrective action plan which is being implemented and
5 contains thorough corrective actions to resolve the issues
6 that led to the unit's shutdown. The NRC has established a
7 startup panel, part of the Manual Chapter 0350 review
8 process.

9 The issues at Crystal River warrant increased NRC
10 attention from both headquarters and the region and
11 therefore the senior managers have classified Crystal River
12 as a Category 2 plant.

13 CHAIRMAN JACKSON: Questions about that?

14 MR. REYES: I still need to address Commissioner
15 Diaz's question about the senior managers' meeting.

16 I guess, in terms of the process, I have
17 participated in previous senior managers' meetings in a
18 different capacity and the particular enhancements that we
19 made to this senior managers' meeting, the one in January,
20 where the regional administrator presented both the negative
21 and positive, I thought it was very useful. It led to a
22 better discussion among the senior managers' meeting and
23 understanding of the facts presented by all the people
24 around the table.

25 When I prepared for the meeting, I had a range of

1 options that I thought would come out of it. I wasn't sure
2 exactly. I didn't have a decision made ahead of time.

3 It was interesting because, on the second day, all
4 the senior managers were discussing the same range of
5 options regarding Crystal River and we talk about no action,
6 which was not an option. We felt that performance required
7 an action by the agency and we discussed clearly that it was
8 not a Category 3 plant. So the range was between a
9 declining performance letter and the Category 2. And we
10 all, in consensus, agreed it was a Category 2 plant and I
11 agreed with that decision.

12 CHAIRMAN JACKSON: Thank you.

13 Any other questions?

14 [No response.]

15 CHAIRMAN JACKSON: Okay, who's next?

16 MR. THOMPSON. Mr. Beach from Region III.

17 MR. BEACH: Good morning, Chairman, Commissioners.

18 Before discussing Lasalle, Zion and Dresden, let
19 me provide you a brief overview of the Commonwealth Edison
20 system and the basis for a 50.54(f) letter.

21 Since the June 1996 senior management meeting,
22 Commonwealth Edison has reacted to significant performance
23 issues at all six of its nuclear sites.

24 The Byron station's performance has been very good
25 to superior with one exception that involved the discovery

1 that inadequate surveillance procedures and corrective
2 actions to servicewater system degradation resulted in the
3 ultimate heat sink being inoperable on several occasions.

4 Braidwood has struggled with material condition
5 and configuration control problems but now appears to be
6 getting well after increased management focus in those
7 areas.

8 Quad Cities effectively resolved some longstanding
9 engineering issues and is currently sustaining improvement.
10 The management team has stayed focused on achieving the
11 improvement initiatives started in 1994.

12 Although Dresden has not yet demonstrated the
13 ability to sustain power operation of both units, the
14 station, like Quad Cities, has shown improvement over the
15 past six months and the station's weaknesses are better
16 defined after the NRC's independent safety inspection.

17 At Zion, there has been some decline in
18 performance over the past six months. A trend of personnel
19 errors, operational events and the poor quality of routine
20 work and engineering activities continue, despite
21 management's efforts to improve.

22 At Lasalle, both units have been shut down since
23 September due to emergent hardware issues, to address
24 performance issues manifested in a risk-significant
25 servicewater event and to address problems highlighted in

1 the most recent systematic assessment of licensee
2 performance.

3 To meet these challenges, Commonwealth Edison is
4 taking some noteworthy actions. During this same period,
5 Commonwealth Edison has significantly increased its
6 allocation of resources to address its systemwide
7 performance problems. In addition, more significant changes
8 were made at senior management levels to provide better and
9 more focused oversight and guidance to the nuclear sites.
10 Five of six vice presidents have now come from outside of
11 the Commonwealth system and five of the six plant managers
12 or general managers, as the case may be, have also come from
13 outside the system. More managers at less senior positions
14 are continuously being recruited and brought into the
15 system.

16 In addition, using a team of industry peers and
17 INPO representatives, Commonwealth performed an independent
18 safety assessment at LaSalle and Zion. This was a
19 particularly noteworthy effort aimed at determining why
20 previous performance initiatives were not successful at
21 these two facilities.

22 The licensees' effort found similar performance
23 problems at each plant. Self-assessment attributed the
24 principal reasons for the problems to be due to, in essence,
25 weak management processes and a lack of management

1 involvement. Comprehensive plans to address these findings
2 are being developed and will be presented at public exits at
3 each of the facilities in February.

4 In response to the findings of the NRC's
5 independent safety inspection at Dresden and other recent
6 NRC inspections, and the self-assessments at Lasalle and
7 Zion, Commonwealth Edison has directed that each site
8 initiate actions to improve the quality, maintenance and
9 accessibility of design information.

10 A confirmatory action letter was issued in
11 November outlining the extensive action Commonwealth Edison
12 is taking or will take to address the engineering
13 deficiencies. Commonwealth Edison essentially has brought
14 in a number of new managers with a philosophy to focus on
15 safety, identify issues, resolve them and fix the plants
16 while opening communications with the NRC.

17 Commonwealth Edison appears to be putting a number
18 of issues on the table and is aggressively seeking change.
19 Although Commonwealth Edison has made a number of management
20 changes, has implemented a number of significant initiatives
21 to improve its performance, most of these initiatives are
22 not yet implemented at Lasalle and Zion.

23 The following discussions regarding Dresden,
24 Lasalle and Zion will show significant challenges remain at
25 these stations. Improvements at Dresden must continue and

1 substantial improvement must be affected at Lasalle and
2 Zion. These needed safety performance improvements must be
3 achieved without negative effects at the other nuclear
4 units. Thus, the senior managers concluded that the acting
5 executive director for operations send a letter, pursuant to
6 10CFR50.54(f) to the chief executive officer of Commonwealth
7 Edison requesting information why the NRC should have
8 confidence that the licensee can operate its nuclear
9 stations while sustaining performance at each site.

10 CHAIRMAN JACKSON: Place this into some context
11 for me, Mr. Beach. Is this an unprecedented action?

12 MR. BEACH: I guess being relatively new to the
13 region, from my perspective, I would say yes, it is, but --

14 MR. MIRAGLIA: In terms of an action coming from
15 the seniors, yes, it is, in terms of previous senior
16 meetings.

17 CHAIRMAN JACKSON: And have we begun any
18 discussion with the licensee as to what kind of information
19 we would expect them to provide to assist us in making the
20 judgment that's inherent in the 50.54 letter?

21 MR. MIRAGLIA: The letter is a request for
22 information and identifies the need for them to do that and
23 the letter indicates we're prepared to enter into dialogue.

24 CHAIRMAN JACKSON: And they have to respond within
25 what, 60 days?

1 MR. THOMPSON: That's what the letter is.
2 Obviously, we have the ability to extend that time if it's
3 needed, if it's warranted and for just cause.

4 CHAIRMAN JACKSON: Why don't you continue? Did
5 you have a question?

6 COMMISSIONER DIAZ: Yes. I have a question.

7 Would you comment on how significant is the issue
8 of poor relationships between the management and the unions
9 at these plants and how you might think it affects the
10 performance of the entire plant personnel?

11 MR. BEACH: That's a difficult question because I
12 think it varies at each of the sites. I think the extent of
13 the problems, obviously, for example, Braidwood and Byron
14 have some problems, but they're able to manage it. I think
15 Lasalle and Zion probably have the most significant
16 problems, but whether that has really had an impact on the
17 ability to manage or not, I really can't comment.

18 COMMISSIONER DIAZ: But is it a problem? Is the
19 union-management interaction a problem at the plants?

20 MR. BEACH: At Lasalle, I think there is evidence
21 that there is a problem there.

22 COMMISSIONER DIAZ: Thank you.

23 CHAIRMAN JACKSON: Do you consider, and perhaps
24 you can address this in your more detailed comments about
25 each plant, do you consider that the decline and performance

1 at Zion since 1993 is attributable to a corporate shift in
2 attention away from that facility as it's focused on other
3 facilities?

4 MR. BEACH: I don't really think so. I think it
5 probably plays a part in it but I don't think it's the major
6 cause.

7 CHAIRMAN JACKSON: All right. Why don't you go
8 on?

9 MR. BEACH: Let me begin with Lasalle. Lasalle
10 was given a trending letter in January of 1994 due to
11 concerns about poor radiological work practices, declining
12 material condition, declining personnel performance, and NRC
13 staff concerns about the licensee's ability to pursue and
14 resolve root causes for these issues.

15 By January 1995, the licensee's initiatives were
16 found to be effective in arresting these adverse trends and
17 a letter was sent urging the continuation of improvement
18 initiatives.

19 However, the licensee's performance since the last
20 senior management meeting in June 1996 has declined. In the
21 first two months following the last senior management
22 meeting, licensee performance was considered at least
23 adequate.

24 While some progress was made in identifying and
25 correcting material condition deficiencies, improvements in

1 plant hardware material condition were slow. Maintenance
2 and engineering backlogs remained high. Emergent work and
3 rework limited the licensee's ability in implementing the
4 station's material condition improvement plan.

5 In June, holes were bored in the safety-related
6 service water pump room floors for the purpose of injecting
7 a sealant material to eliminate water seepage. The service
8 water system serves, by design, as the ultimate heat sink at
9 Lasalle.

10 Since the work control process was circumvented,
11 the work was performed was a minor maintenance activity on a
12 service work request. As a result, no engineering
13 evaluations to determine the impact on operation of the
14 facility were performed and the work was performed without
15 sufficient reviews, procedures or oversight.

16 A large quantity of expandable foam sealant was
17 injected into the safety-related service water tunnel.
18 Since the foam sealant expands considerably when it comes in
19 contact with water, the injections caused two service water
20 plant transients that significantly challenged the operating
21 crew.

22 The event revealed previously unidentified
23 material condition problems and disclosed significant
24 engineering weaknesses in support to plant operations.
25 Escalated enforcement action was issued on January 24th of

1 this year that resulted in a proposed \$650,000 civil
2 penalty.

3 Two months after the service water event, the
4 NRC's systematic assessment of licensee performance was
5 conducted. Category III ratings were assigned in all
6 functional areas with the exception of plant support. The
7 ratings reflected, to a large extent, the lessons of the
8 service water event, with the clear finding that the event
9 confirmed fundamental programmatic weaknesses and management
10 weaknesses that extended throughout the organization.

11 To address these issues, a new management team was
12 put in place at Lasalle. A new site vice president and a
13 new engineering manager are now in place and 13 of 18 of its
14 top managers will be from outside the commonwealth system.

15 Senior corporate management has decided to
16 maintain both units shutdown indefinitely until the recent
17 human performance and hardware deficiencies have been
18 resolved. The new management team appears to understand the
19 scope and significance of its problems and has developed a
20 detailed restart action plan and a plan to affect long-term
21 performance improvements in all organizational areas.

22 The licensee's management changes in its
23 commitment to significant improvement initiatives, including
24 engineering, indicate that actions, when implemented, may
25 correct many of the longstanding performance issues that

1 exist.

2 Reviews of the results of the recent systematic
3 assessment of licensee performance, the preliminary results
4 of the licensee's self-assessment, the Lasalle service water
5 event, and the instances of the failure to use the
6 engineering design change process to properly control plant
7 modifications do, in fact, reveal significant insights into
8 performance at the Lasalle station.

9 These insights reflect the licensee's inability to
10 demonstrate progress in previous improvement initiatives in
11 the plant's material condition and to improve work planning
12 and maintenance processes which were not fully effective.

13 Given the scope and significance of these
14 problems, the senior managers concluded that the Lasalle
15 station warrants increased NRC attention and recommended
16 that Lasalle be placed on the NRC's watch list as a
17 Category II facility.

18 CHAIRMAN JACKSON: Any questions?

19 [No response.]

20 MR. BEACH: Zion was on the NRC's watch list as a
21 Category II facility from January 1991 until January 1993
22 when it was removed from the list based on improved
23 performance.

24 Efforts to improve material condition, upgrade
25 operator performance, and efficiently plan and execute work

1 have not been fully successful. Zion has been discussed at
2 the last two senior management meetings and it appears
3 performance has declined since the June 1996 senior
4 management meeting.

5 During the last senior management meeting cycle,
6 there was some progress in improving control room standards
7 and communications. Operator workarounds have significantly
8 decreased. There has been measured improvement in problem
9 identification.

10 However, several operational errors and unplanned
11 configuration changes occurred. Operators changed equipment
12 configuration status without following procedures. On
13 several occasions, these errors resulted in inadvertent
14 technical specification limiting conditions for operation
15 entries. Corrective actions were either ineffective or
16 untimely and as a result, the NRC issued a \$50,000 civil
17 penalty in August 1996.

18 In response to these errors, there were constant
19 management campaigns to improve and several brief stand
20 downs. These stand downs were positive efforts to change
21 performance. Employees were asked why they should be
22 allowed to work at the station. However, despite these
23 efforts, similar problems still occur.

24 While Zion Station has taken steps to address the
25 number of significant material condition problems, including

1 implementation of a 12-week rolling maintenance schedule,
2 equipment problems continue to adversely affect plant
3 operation. The maintenance backlog remains high which has
4 been compounded by the inability of maintenance personnel to
5 do work correctly the first time.

6 Recent inspections in the area of engineering
7 identified significant deficiencies in the overall execution
8 of engineering activities. An engineering and technical
9 support inspection identified examples of an ineffective
10 50.59 safety evaluation process, weaknesses in the
11 in-service inspection program, examples of inadequate
12 modification, closeout and post-modification testing, and
13 the lack of control and understanding of the technical
14 specification interpretation process.

15 These findings, when combined with examples of
16 inadequate resolution of recurring equipment deficiencies
17 and poor procedure adherence in quality, reflect an overall
18 weakness in engineering support to the station. Escalating
19 enforcement action is pending for the significant
20 deficiencies in the overall execution of engineering
21 activities.

22 Zion Station continues to have one of the highest
23 source terms among PWRs in this country. Although there is
24 been some progress in source term reduction and ALARA
25 planning, these improvements were diminished by inadequate

1 procedure in radiation work permit adherence as well as
2 weaknesses in the control of radioactive material.

3 To address these issues a new management team is
4 in place. The licensee is developing a station operations
5 performance plan and is relying on a new management team to
6 assure effective implementation of the plan.

7 These changes and these kind of actions combined
8 with significant improvement initiatives in operations and
9 engineering when fully implemented may ultimately change
10 Zion Station's performance.

11 To date, however, previous initiatives have not
12 been fully successful. Although Zion has not experienced a
13 significant event like Lasalle, reviews of the licensee's
14 self-assessments and NRC inspection reports show the absence
15 of significant progress in improving the material condition
16 of the plant, continued work process problems and the
17 failure to stem the human error rate.

18 Given these problems, the senior managers
19 concluded that Zion warrants increased NRC attention and
20 recommended that Zion be placed on the NRC watch list as a
21 Category 2 facility.

22 CHAIRMAN JACKSON: Questions?

23 [No response.]

24 MR. BEACH: Dresden was first placed on the NRC
25 Watch List in June, 1987, and removed in December, 1988, and

1 again placed on the Watch List in January, 1992.

2 Significant contributors to the decision to place
3 Dresden on the Watch List a second time included weaknesses
4 in procedure, quality, and adherence, communications,
5 execution of management expectations, plant material
6 condition, supervision and control of work activities, work
7 performance, and engineering and licensing support.

8 Since the last senior management meeting the
9 conduct of operations in the performance of control room
10 operators continued to be good as a result of management
11 initiatives that included reinforcing standards and
12 expectations to the operations staff.

13 In addition, Unit II has operated well since its
14 restart in August. Operators have demonstrated a
15 questioning attitude and will facilitate a prompt
16 identification of potential problems.

17 Some conservative decisions included the manual
18 scram of Unit II last May following a feedwater transient
19 and the decision to shut down Unit III and maintain Unit II
20 in a shutdown while performing a complete overhaul of the 4
21 kV circuit breakers was also conservative.

22 Outside the control room several operator errors
23 occurred which indicated that the rigor and attention to
24 detail seen in the control room has not yet been
25 consistently implemented in the other areas of the plant.

1 During the last six months significant improvement
2 was made in the material condition of the plan and the
3 knowledge, skills and abilities of maintenance personnel.

4 However, emergent work activities continued to
5 hamper the ability to conduct planned work, thereby
6 adversely affecting the ability to reduce work backlogs.

7 Longstanding programmatic problems with the
8 inservice test program and surveillance testing continued to
9 result in the failure to detect all degraded systems and
10 components.

11 There was improved performance in the area of
12 engineering support to the station, particularly associated
13 with system engineering, however emergent issues in the
14 large engineering backlog has also diverted the focus of the
15 engineering organization of significant longstanding
16 problems and was an impediment to quality engineering
17 products.

18 Furthermore, significant weaknesses were
19 identified by the NRC independent safety inspection team in
20 the area of design control.

21 The senior managers discussed the safety
22 performance of Dresden in light of the above discussion and
23 used the senior management meeting Watch List removal
24 evaluation factors. The senior managers discussed the
25 insights from the Dresden independent safety inspection

1 which found that while overall safety performance had
2 improved, the pace of improvement was slow and varied.

3 Significant improvement was evident in the area of
4 operator performance, although Dresden has yet to sustain
5 power operation of both units for an extended period of
6 time.

7 The significant reduction in personnel exposure
8 and contamination events was noted and some improvements
9 were observed in the maintenance process and in the material
10 condition of the plant.

11 However, Dresden continues to be challenged by the
12 high level of emergent work and the large maintenance
13 backlog.

14 Since significant challenges to continued
15 improvement at Dresden remain, the senior managers concluded
16 that Dresden Station warrants increased NRC attention and
17 that Dresden remain on the NRC's Watch List as a Category 2
18 facility.

19 CHAIRMAN JACKSON: Any questions?

20 COMMISSIONER McGAFFIGAN: Could I ask one
21 question? You're just finished with comment?

22 CHAIRMAN JACKSON: No, he's not done with comment,
23 actually. There's a trending letter, right -- I'm sorry.
24 You are finished with comment, right.

25 COMMISSIONER McGAFFIGAN: This goes back to our

1 question that Commissioner Rogers asked at the very
2 beginning about the Hope Creek, where we sent a trending
3 letter and now we are sending a letter saying everything's
4 okay.

5 In the case of Quad Cities, they got trending
6 letters on several occasions in the past and they are
7 outlined in the 5054(f) letter.

8 Have we ever sent a letter of the sort that we are
9 sending at Hope Creed to them? We did that at one of the
10 meetings last year.

11 MR. MIRAGLIA: Yes. We can go back and get the
12 exact date, but there is an exact date where we -- it's
13 about two years ago.

14 COMMISSIONER McGAFFIGAN: Are there any plants --
15 this is maybe one I should have asked at the time -- are
16 there any plants at the moment that have gotten trending
17 letters in the past that we haven't closed out?

18 MR. MIRAGLIA: The answer is no.

19 COMMISSIONER McGAFFIGAN: Okay.

20 CHAIRMAN JACKSON: Thank you.

21 MR. THOMPSON: I understand that is correct.

22 CHAIRMAN JACKSON: Any other questions?

23 [No response.]

24 CHAIRMAN JACKSON: Do you have one more to talk
25 about?

1 MR. BEACH: Two more.

2 CHAIRMAN JACKSON: I see. Okay.

3 MR. BEACH: Let me answer your, Commissioner
4 Diaz's, question about the senior management meeting process
5 earlier.

6 I really had no preconceived decisions as to what
7 would go on the Watch List or what would not go on the Watch
8 List. I did have very strong feelings that whatever
9 happened to Lasalle should happen to Zion because of the
10 measurable performance difference between Zion and Lasalle
11 and Dresden -- whatever that may be -- because if you visit
12 the plants there is a significant difference between Zion
13 and Lasalle and Dresden, although all three would be
14 considered Watch List plants.

15 Using the theory that it is harder to get off the
16 Watch List than it is to get on, and that we have to be
17 skeptical, I think clearly if you take away the service
18 water event, the performance of the two facilities is very
19 close.

20 COMMISSIONER DIAZ: Thank you.

21 CHAIRMAN JACKSON: Okay.

22 MR. BEACH: Point Beach -- Point Beach Nuclear
23 Plant was discussed for the first time at the senior
24 management meeting because of the plant's performance
25 decline since the systematic assessment of licensee

1 performance that was issue in April, 1996.

2 Weaknesses in operation, engineering and
3 maintenance led to a number of violations involving
4 inattentiveness to duty by control room operators and
5 ineffective surveillance testing.

6 A significant enforcement action was issued in
7 early December with a proposed civil penalty in the amount
8 of \$325,000.

9 The primary cause of these issues appears to be a
10 focus on keeping the units operating in an environment that
11 did not encourage problem identification or questioning
12 attitudes.

13 To address these problems early in the period, the
14 facility provided NRC with a substantial improvement plan.
15 However, NRC continued to find significant new issues that
16 the licensee had not identified.

17 Little was being done by the licensee in the way
18 of performing self or independent assessments of plant
19 activities to fully bound the performance issues that were
20 being identified.

21 Because of this, the NRC performed an operational
22 safety team inspection to better define current performance
23 and assess the licensee's corrective actions. The OSTI
24 findings confirmed earlier NRC findings that corrective
25 action efforts to date were not broad in scope to

1 appropriately assess the extent the extent of the problems
2 identified.

3 In early December the licensee appointed a new
4 Chief Nuclear Officer and on December 12, 1996 the licensee
5 issued a letter containing commitments that will be
6 completed prior to restart of Unit II from its current
7 outage.

8 The NRC issued a confirmatory action letter
9 confirming these commitments. The commitments provided in
10 the December 12th letter included reviewing a broad range of
11 procedure and work activities.

12 Significant licensee actions included realigning
13 engineering into a system engineering concept to better
14 focus on plant system status and performance, committing to
15 move corporate engineering to the plant site, realigning
16 senior plant and corporate management and committing to add
17 additions plant staff, up to 40 FTE, from outside Point
18 Beach.

19 The licensee is starting to show encouraging signs
20 as well in the way of acknowledging its performance
21 weaknesses. Since the appointment of the new Chief Nuclear
22 Officer, the licensee has started to demonstrate the ability
23 to deal with its own problems and take actions needed to
24 correct its problems.

25 There has been a positive trend in the licensee's

1 identification of issues in the past weeks.

2 A number of condition reports are being generated
3 and there's a significant increase in the number of
4 10CFR50.72 issues being reported to the NRC.

5 Early intervention by the NRC through its
6 inspection program and aggressive licensee actions may
7 arrest this decline. However, since a number of actions are
8 still needed, the senior managers recommended that the
9 Acting Executive Director for Operations send a trending
10 letter to Wisconsin Electric informing the Chief Executive
11 Officer of the agencies concerned regarding the decline in
12 operational safety performance at Point Beach Station.

13 CHAIRMAN JACKSON: Any questions?

14 [No response.]

15 MR. BEACH: Clinton Power Station was discussed at
16 the senior management meeting for the first time since 1991
17 due to an overall decline in plant performance during the
18 past year.

19 The evidence of the decline was clearly
20 demonstrated in September 1996 when a sequence of events
21 associated with a reactor recirc pump seal failure revealed
22 significant deficiencies at the facility. The deficiencies
23 included problems with procedural adequacy and adherence,
24 lack of rigor in conducting operations, and weak engineering
25 support to operations.

1 In addition, the deficiencies included lapses in
2 safety focus where managers and staff were not fully
3 knowledgeable of their basic responsibilities and where it
4 appears plant management placed too much emphasis on keeping
5 the plant on-line.

6 Many of the issues identified as a result of the
7 September 5th event appear to violate NRC requirements and
8 an enforcement conference is planned for early February.

9 It appears that a practice had developed where
10 procedures were not always followed at the sight. By
11 procedure, if the intent of a procedure were satisfied, a
12 procedure change was not required. This may have
13 contributed to the procedural adherence problems
14 demonstrated by the reactor recirculation pump seal failure
15 event and other examples identified where operators work
16 around procedure deficiencies rather than fix them.

17 While initially slow in assessing the September
18 5th event, the licensee has implemented a number of
19 management changes including a new plant manager and a new
20 assistant plant manager of operations. The licensee has
21 devoted significant resources and management attention to
22 identifying and addressing problems.

23 The new managers are encouraging a much lower
24 threshold for the initiation of condition reports,
25 encouraging the staff to improve the quality of procedures,

1 and to stop work activities when problems are encountered,
2 and encouraging additional conservatism in the scheduling
3 and performance of work. Conservative decisions have been
4 made even though they had a negative impact on the outage
5 schedule.

6 Clinton is currently shutdown and confirmatory
7 action letters were issued to the licensee in September 1996
8 and January 1997 to document the staff's understanding of
9 the actions that the licensee would take prior to restart in
10 response to the September 1996 recirculation pump seal
11 failure event.

12 The recent management and operating crew changes
13 at Clinton, the licensee initiatives aimed at instilling
14 conservative decisionmaking and the actions to resolve a
15 number of procedure and material condition issues will
16 hopefully arrest the decline in performance.

17 However, because of the concern about the
18 licensee's reduced emphasis on safe operation during the
19 reactor recirculation seal failure event and the number of
20 examples of problems with procedural adequacy and adherence,
21 senior managers recommended that the acting executive
22 director for operations send a trending letter to Illinois
23 Power Company informing the chief executive officer of the
24 agencies concerned regarding the decline in operational
25 safety performance at the Clinton power station.

1 CHAIRMAN JACKSON: Any questions?

2 MR. THOMPSON: That concludes are prepared
3 discussions on the plants and we'd be pleased to respond to
4 any Commissioner questions.

5 CHAIRMAN JACKSON: I think Mr. Callan had
6 something?

7 MR. CALLAN: I would like an opportunity to
8 respond to Commissioner Diaz's question.

9 In my view, one of the more striking aspects of
10 these changes was to make the assessment or decision-making
11 process much more difficult, in some cases agonizing, a
12 reflection of that difficulty that came from arguing both
13 sides of the equation was that we had budgeted about a hour
14 on the second day to go through the plants we had discussed
15 and to come to closure. We ended up taking the full six
16 hours of the second day which precluded talking about
17 materials, as we mentioned earlier. So that reflects the
18 type of discussion that was, I think, prompted by the way
19 the material was presented.

20 COMMISSIONER DIAZ: Thank you.

21 CHAIRMAN JACKSON: Okay. Is there anything else?

22 MR. THOMPSON: I think we now have completed our
23 presentation and are pleased to respond to any questions
24 that you may have.

25 CHAIRMAN JACKSON: Commissioner Rogers?

1 COMMISSIONER ROGERS: I think the most obvious
2 question that comes out of where we are right now is really
3 what is the significance of what appears to be an abrupt
4 change in the status of a plant, either that it was not even
5 discussed at one meeting and at the next meeting, got a
6 trending letter, or didn't have a trending letter and
7 abruptly wound up on the watch list.

8 It's a question of what are we to make of that?
9 Does this indicate that there's abrupt deterioration at
10 these plants over a six-month period that is suggested by
11 such action, or is this an indication of a different way of
12 looking at the plants from the way we looked at them before,
13 or the third one is, of course, inattention on the NRC's
14 part.

15 I think it's important that you comment on that,
16 whether the new way of evaluating plants in a more
17 systematic way has led to a quicker decision than in the
18 past or whether it's just a very mixed bag so that some
19 plants have started to slip rapidly and it's appropriate to
20 take them from not even being discussed to a watch list
21 status, which I guess has happened in one case, or not being
22 discussed at all and then going on getting a trending letter
23 at the next senior management meeting.

24 In other words, one would expect some kind of a
25 continuous process going on rather than an abrupt process at

1 most plants but that may not be the case. However, our
2 judgments seem to be being made here somewhat in a stepwise
3 fashion.

4 It could be the new way of reviewing plants and it
5 might be an indication of something else happening out there
6 in the world that's taking place more rapidly. I know we've
7 touched on the question of resources or attempting to keep
8 plants running, whether we're seeing some evidence of a
9 shift in safety culture at plants.

10 In other words, I'd like to just understand
11 whether we should read anything into these actions or
12 whether we simply are in a transition period between one way
13 of looking at plants and another way of looking at plants
14 and that it will all sort out and stabilize the next time
15 around.

16 CHAIRMAN JACKSON: Now let's give you a chance to
17 answer.

18 MR. MIRAGLIA: I'll try to respond from the
19 context of the overall program.

20 I think it would be a misperception to say it's a
21 new process. The process has been an evolving process over
22 time. The Commission has directed, the Chairman has
23 directed over the last two years that we should look for
24 more ways of using objective evidence, making the process
25 more transparent. So the processes have changed. I think

1 they are evolutionary-type changes and I don't think the
2 presentation mechanism was an abrupt change that resulted in
3 what you have characterized as a perceived perception in the
4 step change for facilities.

5 I think it does indicate that we need to closely
6 look at trending letter versus category issues,
7 categorization issues. That's an issue that may have to be
8 looked at to say is there a sharper distinction. I think
9 each of the regional administrators, in their presentation,
10 indicated there was some agonizing or some balancing in
11 terms of those.

12 In terms of why each plant wound up where they
13 did, I think they were addressed by each regional
14 administrator and they could reiterate it. For example, in
15 the Crystal River case, it was an engineering modification
16 that was made in the spring, that was subsequently found at
17 a later date that said that facility operated outside its
18 design and licensing basis for a period of time.

19 I think that was a telling kind of thing and that
20 goes to Mr. Thompson's observation that the issues of design
21 are getting a little bit more focused and our program hadn't
22 been focusing on that, and we're trying to redirect this.
23 We responded to the Chairman earlier.

24 In terms of the Clinton, there was a significant
25 shift from the previous assessment period in terms of the

1 significance of the recirculation seal.

2 So I think each of those, there's an answer for
3 and I think it's a range of the topics that you identified
4 in your question, but I don't see it as a very stepwise
5 difference in how we're doing things. I think it was a
6 modest change that we made to the process and I think the
7 process has been evolving with time. We'll have to look at
8 that again in terms of the outcome.

9 COMMISSIONER ROGERS: But if you look at your
10 results, it looks like --

11 MR. THOMPSON: Yes, the perception could be that
12 and I think if you look at each of the issues, Salem was a
13 retrospective look as we've explained. I think Bill
14 addressed the differences between Zion, Lasalle and Dresden
15 given the relative performance of those kinds of facilities.

16 MR. MILLER: Maine Yankee, I don't think it was a
17 decline. I think that we just got insight that we had not
18 gotten before, a combination of an important allegation that
19 panned out and a deep vertical slice, a 22-member team for 3
20 or 4 months. That's a level of scrutiny that permitted us
21 to uncover things we previously hadn't done.

22 We're going back, of course, looking at that,
23 trying to learn lessons from it, but some of it has to do
24 with resources. It goes back to the question we had before
25 from the Chairman about design and how we look at design.

1 COMMISSIONER DIAZ: If you look at --

2 CHAIRMAN JACKSON: Excuse me. Commissioner Dicus?

3 COMMISSIONER DICUS: We have to take turns.

4 CHAIRMAN JACKSON: That's right. Otherwise, it
5 gets out of hand.

6 COMMISSIONER DICUS: This follows up a little bit,
7 I think, on Commissioner Rogers' question, together with a
8 comment the Chairman made earlier about occasionally we
9 appear to miss something.

10 When plants go on the watch list, and these
11 plants, I was prone to go back and look at the most recent
12 SALP ratings for the plants. For the most part -- some
13 exceptions -- but for the most part, there seems to be
14 little correlation.

15 I recognize that a SALP evaluation looks at
16 certain things, is done a certain way. It may be a very
17 subjective sort of evaluation and this senior management
18 meeting evaluation is done differently.

19 Given that, and given the apparent, for the most
20 part, lack of correlation between them -- I guess I'm
21 directing this question to anyone that wants to answer it
22 but probably to Mr. Thompson. Feel free to jump in anyway.

23 Do you think we still need these two separate
24 kinds of evaluations?

25 MR. THOMPSON: I certainly think this is a process

1 we need to look at. My specific responsibilities for the
2 reactor area are fairly new although I was involved in a
3 previous life.

4 My understanding, and I think Frank will probably
5 be able to articulate it better, there is more linkage than
6 is kind of apparent as the way we do the processing in
7 preparations for the senior management meeting as well as
8 the SALP process itself. So I want to ask Frank to address
9 the linkage and how that should be -- it may not be obvious
10 to the public how we do our communications both internally
11 and with the licensee on that.

12 MR. MIRAGLIA: In terms of the perception relative
13 to the SALP, and one of the management directives that we've
14 made public is we've tried to articulate how those pieces
15 fit together, the SALP is nominally a backward or a
16 retrospective look.

17 Some of those span a long period of time and
18 within the context of the process, it is to look at the last
19 six months. Some of the SALPs that you see that are
20 information or input are dated in terms of the period of
21 performance that we are looking at.

22 For one of Bill's plants, he talked -- I believe
23 it was Point Beach, the SALP looked relatively good and it
24 was from backwards and it was the performance in the next
25 period that we wouldn't see in terms of an evaluation of

1 SALP to the conclusion in that SALP period.

2 We have a continuum of inspection processes and
3 evaluation and we have a number of performance assessment
4 type tools and this was raised, I believe, in one of the
5 SRMs in a broad sense that came out of our briefing on SALP,
6 which is how do these pieces go together and we make them
7 more effective and more efficient.

8 They all have a role and a use and I think we are
9 in an evolving kind of process with respect to the
10 performance assessments. We have a plant performance review
11 that looks at the inspection results between region and
12 headquarters and says, what are we doing for the next six
13 months? And so we have various performance assessment tools
14 that covered various periods of time.

15 At the screening meetings, prior to the senior
16 management meeting, one of the goals is to say where were we
17 with respect to the last SALP and the last performance
18 review, what has occurred in that period of time and the
19 focus is on the six months preceding the meeting. So there
20 is some time lag and some time differences and it does
21 raise -- give rise to the questions and perceptions as to
22 what is the SALP telling you? You have to look at what was
23 the SALP and what was the period of the SALP and what
24 performance period are we talking about and they are a
25 little bit different.

1 We have tried to integrate and show how they are
2 interrelated and integrated and that's something that we
3 will be looking at in response to some of the SRMs for the
4 Commission's response.

5 CHAIRMAN JACKSON: Mr. Callan?

6 MR. CALLAN: I was just going to make two points.
7 One was whispered to me by Luis. I'll give him credit.

8 [Laughter.]

9 MR. REYES: Which one?

10 [Laughter.]

11 MR. CALLAN: The SALP process as Hugh, as several
12 people mentioned earlier, actually the inspection process
13 has not in the past -- in recent years anyway, focused on
14 engineering and licensee basis issues. Hence, SALPs
15 conducted during that same time period would also not
16 reflect a focus in those areas and, as we've said earlier,
17 problems in those areas were major themes in some of the
18 plants we discussed. So one would expect, therefore, some
19 degree of disconnect between SALP and the discussion plants
20 today in that arena.

21 The second point I make is just to reinforce
22 something that Frank Miraglia had just said and that is to
23 really put a SALP report today in its proper context, you
24 have to look at the SALP report and every six months after
25 that, and the timing is intended to be coincident with the

1 senior management meeting process, so they are integrated,
2 the region does a six-month update of that SALP and it's a
3 fairly rigorous process involving, in some cases,
4 significant shifts of inspection resources as a result. And
5 then each licensee is sent a letter after that six-month
6 review.

7 What we don't do is revise the SALP scores but a
8 discerning reader can certainly detect a change,
9 evolutionary change or even an abrupt change in perspective.
10 So you would have to look at -- if you think of those
11 six-month assessments as supplements to the SALP, you would
12 have to look at the SALP and its subsequent supplements to
13 capture where the agency is on a given licensee. The output
14 of that product.

15 MR. MIRAGLIA: The output of that product, as Mr.
16 Callan is indicating, is where the inspection effort is
17 going to be in the next six months or more and that's a
18 signal to where we think we have concerns or perhaps not
19 enough information to make a judgment and that's a signal to
20 the utility and the public. It's done in a public kind of
21 way, as to where our focus is shifting.

22 But with respect to engineering, I think SALP does
23 cover engineering. However, the focus in the past has been
24 on operational support to engineering and this design aspect
25 is a new element that, as I indicated to the Chairman, we

1 are looking at ways of enhancing that, so the design
2 aspect --

3 CHAIRMAN JACKSON: With the right balance, so you
4 don't lose the focus.

5 MR. MIRAGLIA: We have to have operational safety
6 focus as well, so this is an issue that we are looking at,
7 we've taken modest steps and we are looking for further
8 improvements in that area as well.

9 MR. CALLAN: And I would just say, finally, your
10 point, Commissioner, is fundamentally valid. There are
11 frequently, maybe one could say too frequently there is a
12 disconnect between the SALP assessment, even when updated,
13 and the results of the senior management meeting and I think
14 Hub Miller did a good job of describing how that can come
15 about and there are several examples of the staff developing
16 insights based upon events, transients.

17 CHAIRMAN JACKSON: Commissioner Diaz?

18 COMMISSIONER DIAZ: Thank you.

19 I have some thoughts I want to bounce around a
20 little bit.

21 First I would like to commend the staff for the
22 efforts in organizing, documenting and orchestrating the
23 senior management meeting. Obviously, a tremendous amount
24 of work has gone into it. The decisions that were made have
25 significant impact on the licensees and should be some

1 indicators of both how the industry and how the NRC
2 discharge their responsibilities.

3 And yet the Commission is ultimately responsible
4 for the decisions that the staff makes. In reviewing all
5 this latest information I still have the opinion that the
6 sequence of correlative processes leading to the decisions
7 made by the senior management meeting are not transparent to
8 the Commission and much less to the public.

9 In particular, it appears that licensee events
10 drive the process and drive the decisionmaking rather than a
11 more balance, holistic approach. Obviously, the staff must
12 have, and I am sure they did have, weigh the safety
13 significance and risk implications of every major component
14 of the evaluation and consider the enforcement actions and
15 other truths that are available to them from the regulatory
16 process.

17 I am pleased to hear that this effort, having
18 improved the quality of the meeting and having resulted in
19 significant improvement, that I am sure will be apparent to
20 us shortly. Yet it is not apparent to me how these are all
21 integrated in the decisionmaking process and how they
22 correlate with a few decisions, maybe three, made at these
23 meetings, especially those plants that have never been on a
24 watch list or received a trending letter.

25 Specifically, I have concerns how Maine Yankee,

1 Zion and Crystal River were placed directly on the watch
2 list when, a short time ago, they were considered good
3 performers and, when one looks beyond an event, we find
4 aggressive correction and remedial reaction programs that
5 the staff have praised. A trending letter might be more
6 consistent with the way we have acted in comparable
7 situations.

8 I am also concerned with the large number of
9 plants placed on the watch list. Again, echoing my fellow
10 commissioners, it appears that both the licensee and the NRC
11 are not doing enough to discern early and in a
12 programmatically correct manner the trends that lead to
13 questionable performance. It is our duty to provide early
14 trending. It is our duty to provide guidance to the
15 licensees, to avoid the situations that have led to this
16 what I call massive placing of plants on the watch list.

17 I would encourage my fellow commissioners to
18 expeditiously establish additional guidance for the staff on
19 the issue of our processes for evaluations of licensee
20 performance leading to the senior management meeting
21 decisions and the Commission input after those decisions are
22 made.

23 I urge the staff to assist us in transforming this
24 entire program to a fully accountable, fully transparent
25 process, clear to the public and the licensee.

1 Thank you, Madam Chairman.

2 CHAIRMAN JACKSON: Any comments?

3 Commissioner McGaffigan.

4 COMMISSIONER MCGAFFIGAN: I didn't have a prepared
5 speech but --

6 COMMISSIONER DIAZ: Good.

7 [Laughter.]

8 COMMISSIONER MCGAFFIGAN: One of the questions on
9 the senior management -- we have all been referring to this
10 Arthur Andersen study. Is that going to be released or has
11 it been released to the public?

12 MR. THOMPSON: It will be placed in the public
13 document room today.

14 COMMISSIONER MCGAFFIGAN: Because I think that is
15 very important.

16 My question goes to something that Commissioner
17 Dicus asked at the very outset. You all read that report.
18 The heart of the report, I'll tell the public and you can
19 read it, is that the process hasn't worked well in the past,
20 that there were problems with it and the solution is
21 suggested. The solution has to do with using our own
22 performance indicators and a decision matrix, which -- the
23 performance indicators aren't perfect, the decision matrix
24 isn't perfect but it might be a major improvement if we can
25 perfect it and I know the staff is going to come back and

1 tell us in February some initial thoughts, in March some
2 further thoughts on that.

3 But it strikes me that you are all human and the
4 thrust of this report is that we probably have missed things
5 in the past, that there are plants that we probably should
6 have taken action on earlier, we let people off lists
7 quicker than they should have been. In one of the examples,
8 we indicate the performance got even worse and we never
9 discussed them again.

10 Did that -- maybe I shouldn't ask the question but
11 it has to have affected you as you sit there knowing that
12 this is going to be a public document, knowing that you are
13 going to have to deal with is this model the correct model
14 or something close to it better and more objective than what
15 we've done in the past?

16 So if I had a prepared statement, it would be
17 something along the lines of that I -- there may have been a
18 renormalization at this point, it may have nothing to do
19 with whether the industry has been performing better or
20 worse in the last several months, although I think in each
21 case the staff has good reasons, but it may well reflect the
22 general criticism and then I commend the staff and the
23 Commission that was here for asking for this report. It
24 reflects that we may not have been perfect in the past, we
25 have to renormalize and move forward. Like Commissioner

1 Diaz, I think I won't ask for answers, I just want to make
2 that comment.

3 CHAIRMAN JACKSON: What I would like to do is
4 thank the staff for an informative briefing and for honesty.

5 The Commission is interested in the results from
6 the 10CFR50.54(f) letter to Commonwealth Edison. I
7 understand that the licensee's response is due in 60 days,
8 so I'm going to be scheduling or asking that there be a
9 Commission briefing scheduled soon after you've had time to
10 evaluate the information and to determine what actions, if
11 any, need to be taken as a consequence.

12 We'll also be asking Commonwealth Edison to also
13 participate in that briefing, to speak to their response,
14 and so we'll schedule that meeting as appropriate relative
15 to being able to have that kind of information on the table.

16 In general, I found the results of this senior
17 management meeting to be encouraging. With regard to
18 improving decisionmaking by basing them on performance,
19 demonstrated safety performance.

20 I believe that the processes used and the results,
21 while not perfect, as everyone has indicated, are credible.
22 You have laid out your reasons in each case. But as has
23 been identified, room for improvement does remain in
24 finalizing and using objective, meaningful performance
25 indicators, recognizing the leading indicators that identify

1 where cost-cutting measures, for instance, may impact safe
2 operation, and in monitoring our licensee actions to ensure
3 that safety performance problems have actually been
4 corrected.

5 I think with the transitions which are rapidly
6 occurring in the electric utility industry, it is imperative
7 that NRC be timely, be fair, be objective and as accurate as
8 we can be, it's still an imperfect process, in evaluating
9 plant performance to ensure the continued safety of
10 operating commercial reactors.

11 I think that a challenge has been laid before you
12 relative to helping not only the Commission, but the public
13 understand the linkages between the various evaluative
14 mechanisms that we use and how one plays into the other.

15 I think you also have a challenge to explain that
16 the senior management meeting results are meant to focus
17 attention as opposed to being a regulatory decision. The
18 50.54(f) letter is a regulatory action.

19 To this end, then, the Commission plans to closely
20 monitor the staff's progress in this area and Commission
21 meetings have been scheduled in the near future to discuss
22 the status of improvements in the Operating Reactor
23 Oversight Program as well as the status of the analysis of
24 the plant watch list indicators. I think that will be a
25 robust discussion and I think that those meetings are the

1 appropriate places to take up the broader-based policy
2 implications as opposed to here.

3 Unless there are any further closing comments or
4 speeches, we are adjourned.

5 [Whereupon, at 12:00 p.m., the briefing was
6 concluded.]

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CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON OPERATING REACTORS AND
FUEL FACILITIES - PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Wednesday, January 29, 1997

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber:



Reporter: Christopher B. Cutchall

PERIODIC BRIEFING ON OPERATING REACTORS AND MATERIAL FACILITIES

January 29, 1997

**H. Thompson
F. Miraglia
C. Paperiello
Regional Administrators**

CATEGORY 1

PLANTS REMOVED FROM THE WATCH LIST

Plants in this category have taken effective action to correct identified problems and to implement programs for improved performance. No further NRC special attention is necessary beyond the regional office's current level of monitoring to ensure improvement continues.

NONE

CATEGORY 2

PLANTS AUTHORIZED TO OPERATE THAT THE NRC WILL MONITOR CLOSELY

Plants in this category are having or have had weaknesses that warrant increased NRC attention from both headquarters and the regional office. A plant will remain in this category until the licensee demonstrates a period of improved performance.

Indian Point 3
Maine Yankee
Salem 1 & 2
Crystal River 3

Dresden 2 & 3
LaSalle 1 & 2
Zion 1 & 2

CATEGORY 3

SHUTDOWN PLANTS REQUIRING NRC AUTHORIZATION TO OPERATE AND WHICH THE NRC WILL MONITOR CLOSELY

Plants in this category are having or have had significant weaknesses that warrant maintaining the plant in a shutdown condition until the licensee can demonstrate to the NRC that adequate programs have both been established and implemented to ensure substantial improvement.

Millstone 1, 2 & 3

TRENDING LETTER

Clinton

Point Beach 1 & 2

CORRECTION OF ADVERSE TREND

Hope Creek

PRIORITY MATERIAL FACILITIES

NONE

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