

ORIGINAL

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: **BRIEFING ON OPERATING REACTORS AND
FUEL FACILITIES**

Location: **Rockville, Maryland**

Date: **Wednesday, June 25, 1997**

Pages: **1 - 80**

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 ***

4 BRIEFING ON OPERATING REACTORS AND FUEL FACILITIES

5 ***

6 PUBLIC MEETING

7 ***

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

13 Wednesday, June 25, 1997
14

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

19 COMMISSIONERS PRESENT:

20 SHIRLEY A. JACKSON, Chairman of the Commission
21 KENNETH C. ROGERS, Member of the Commission
22 EDWARD MCGAFFIGAN, JR., Member of the Commission
23 NILS J. DIAZ, Member of the Commission
24
25

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1 STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

2 STEPHEN BURNS, Deputy General Counsel

3 JOHN C. HOYLE, Secretary

4 BILL BEACH, Region III Administrator

5 HUBERT MILLER, Region I Administrator

6 SAMUEL COLLINS, Director, NRR

7 JOSEPH CALLAN, EDO

8 DR. CARL PAPERIELLO, Director, NMSS

9 LUIS REYES, Region II Administrator

10 ELLIS MERSCHOFF, 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 23rd senior management meeting.

The senior management meetings provide a forum for NRC's senior managers to assess nuclear power reactor and fuel facility operational safety performance, and ensure that the NRC is properly focusing its resources on facilities that need the most regulatory attention based on safety performance and on issues of greatest safety concern.

The senior management meeting process has evolved over the past 10 years. The Commission would be interested in hearing about the actions taken to improve the quality of discussions and to enhance the consistency of decisions during the most recent senior management meeting. I understand that copies of the slide presentation are available at the entrances to the meeting room, and unless my fellow Commissioners have any comments, Mr. Callan, please proceed.

MR. CALLAN: Thank you, Chairman. Good morning. Good morning, Chairman Jackson, Commissioners.

With me this morning are the office directors for

1 both NRR and NMSS, Sam Collins, to my right, and Carl
2 Paperiello, to my left, and the four regional
3 administrators: Hub Miller, of Region I; Luis Reyes, Region
4 II; Bill Beach, Region III; and Ellis Merschhoff, of Region
5 IV.

6 Chairman, our primary purpose here of course is to
7 brief you on the results of the senior management meeting
8 that was held two weeks ago, on June 10 and 11, in Region I.
9 We do intend largely through Sam Collins' opening remarks to
10 expand on the subjects that you touched on in your comments,
11 to talk about enhancements made to the process to make the
12 process more scrutable and consistent and robust.

13 The two days, June 10 and 11, were devoted almost
14 entirely to discussing plant performance. That in itself is
15 a substantial change from previous senior management
16 meetings where essentially only the first day was devoted to
17 plant performance discussions. Also we used for the first
18 time the newly issued management directive 8.14, which
19 covers the senior management meeting process. This
20 management directive provides guidance in the preparation
21 and conduct of the senior management meeting, and the
22 guidance is intended to make the process more consistent and
23 scrutable and therefore more credible.

24 I'd like to note in particular the expansive use
25 that we made of the nuclear powerplant performance

1 evaluation templates that was provided in the management
2 directive, and also the use of the so-called pro/con charts
3 that were first introduced last January, and we discussed
4 them briefly with the Commission following the January
5 senior management meeting.

6 The pro/con charts were used as a tool to focus
7 attention of the senior managers on the pertinent
8 performance issues that spoke to reasons for increasing and
9 also decreasing the agency level of attention. The primary
10 purpose of the pro/con charts was to and is to reduce
11 excessive influence of the regional administrators in the
12 evaluative process.

13 One final item I would like to mention before I
14 turn the meeting over to Sam Collins for a more detailed
15 discussion of process changes is that this was the first
16 senior management meeting attended by the chief information
17 officer, Tony Galante, and the chief financial officer,
18 Jesse Funches, who, together with me, comprise the executive
19 council. Further, and very significantly, it was the first
20 senior management meeting participated in by the agency's
21 allocation coordinator, Ed Baker, who in a couple instances
22 provided very pivotal information.

23 This concludes my opening remarks, and before I
24 turn the meeting over to Sam Collins, I'd like to note that
25 when Sam completes along with the regional administrators a

1 discussion of the operating reactor status, Carl Paperiello
2 will discuss a brief overview of our process for evaluating
3 fuel cycle facilities.

4 And with that, Sam Collins.

5 MR. COLLINS: Good morning, Chairman,
6 Commissioners.

7 Before I start into the preplanned remarks, I
8 would like to acknowledge as Joe mentioned that the process
9 is controlled by management directive 8.14, which provides
10 for this Commission meeting as we brief the Members of the
11 Commission on the results of the process. The process
12 itself starts with inspection, and I guess we all know
13 that's what we do as an agency, the inspection results
14 formulate the plant performance reviews. The plant
15 performance reviews feed into the SALP process, and we also
16 have the senior management meeting process to assess
17 performance.

18 All of those are being looked at in an integrated
19 way as a result of Commission prompting, and that's detailed
20 in the paper that's currently in front of the Commission for
21 review. That SECY paper is dated June 6, and the staff is
22 awaiting the Commission review and directive on that paper
23 to integrate and review those processes in an aggregate way.

24 The process as it exists today and as was used for
25 the meeting conducted and hosted by Region I is using the

1 management directive which is dated in March. This
2 management directive is also used in the draft form for the
3 January meeting. This is the second such meeting that we
4 have used management directive 8.14. And the process is
5 improving, but we have a ways to go. As indicated, as a
6 result of lessons learned from the senior management meeting
7 that was conducted, we are taking those comments as a
8 critique of the plan as it's currently provided for in the
9 management directive, and we will build those lessons
10 learned in and plan to brief the Commission or the
11 assistants on those improvements in the future.

12 I will talk more about the specific changes in the
13 processes as I detail the meeting itself.

14 As you are well aware, the management directive
15 indicates that the process itself has two principal
16 objectives as it relates to nuclear powerplant performance.
17 The first is to identify potential problems in performance
18 and adverse trends before they become actual safety events,
19 and, secondly, to utilize agency resources in overseeing
20 operating reactor safety.

21 An integrated review of plant performance is
22 conducted using objective information such as plant-specific
23 inspection results, operating experience, probabilistic risk
24 insight, systematic assessment of licensee performance,
25 performance indicators, and enforcement history. All of

1 that data is provided for the screening meetings and is
2 subsequently provided for specific plants discussed at the
3 senior management meeting. Special attention is given to
4 the effectiveness of licensee self-assessments and the
5 effectiveness of corrective actions taken for problems
6 identified by licensees. Again, the focus on that
7 initiative is a result of past reviews and critiques of our
8 process.

9 Our objective at the senior management meeting
10 process is to identify facilities whose performance requires
11 agencywide close monitoring and oversight. That's the
12 departure from the SALP process to the senior management
13 meeting process. The SALP process focuses primarily on the
14 allocation of region resources. We also discuss planned
15 inspection activities, NRC management oversight and
16 allocation of resources for individual plant discussed, and
17 at times formulate initiatives based on agencywide reviews.
18 And we have one such initiative as a result of this most
19 recent senior management meeting.

20 Before presenting the results of the June senior
21 management meeting I'd like to briefly review some of those
22 changes that Joe mentioned to the senior management meeting
23 process that have been recently implemented in an attempt to
24 make the process more effective and more scrutable.

25 In the April screening meeting in which plants

1 discussed in the May meeting were identified, we conducted
2 that meeting with wider participation by the Agency managers
3 including the Directors of the Office of Investigation, the
4 Office of Enforcement and AEOD, in addition to myself and
5 the Regional Administrators of the regions themselves.

6 As the Chair of the meeting, I solicited inputs
7 from all the participating managers regarding plant
8 performance to ensure that all pertinent insights were
9 considered in the process.

10 Our threshold for selecting discussion plants was
11 either the Director of NRR, the Regional Administrator,
12 OE -- Office of Enforcement -- or AEOD Directors could
13 designate a plant for Senior Management Meeting discussion.

14 As soon as a plant was identified as warranting
15 discussion the plant was placed on the candidate for
16 discussion at the Senior Management Meeting list, and we
17 moved on. That is a departure from the past.

18 Any plant taken to the Senior Management Meeting
19 would be considered eligible to be given Agency action,
20 which is a trending letter or a Watch List, so there was an
21 assumption that as a criteria for a plant moving onto Senior
22 Management Meeting discussions there was a sponsor for that
23 plant to discuss the reasons why that plant prompted further
24 agency review.

25 The Arthur Andersen trend charts and the AEOD

1 economic data were available at the screening meetings and
2 they were discussed at the screening meetings but they were
3 not used in selecting discussion plants.

4 At the January, 1997 Senior Management Meeting the
5 Senior Managers instituted the use of charts to display
6 arguments for either, one, increasing or decreasing, as
7 appropriate, the level of Agency attention given to a plant,
8 and two, maintaining the current level of Agency attention.

9 These charts have become known as the Pro/Con
10 List.

11 We have a number of lessons learned from the
12 Senior Management Meeting having to do with the Pro/Con
13 List. It is a little more difficult perhaps than we
14 anticipated using that Pro/Con List. We'll build those
15 lessons in at the next meeting.

16 For the June, 1997 Senior Management Meeting we
17 enhanced the Pro/Con charts with clearer guidance on how to
18 prepare them and we aligned the charts with Senior
19 Management Meeting nuclear power plant performance
20 evaluation templates from the Management Directive 814.

21 Those templates are described in detail in 814.
22 There are criteria for using them and there are different
23 areas to be reviewed.

24 As at the screening meetings, an active exchange
25 of views was attained at the Senior Management Meeting --

1 "active" is probably a word that would characterize the
2 discussions -- through direct solicitation of opinions from
3 the meeting participants, also from the experience of
4 Regional Administrators and Office Directors with the plants
5 themselves.

6 As you know, we have Regional Administrators who
7 have experience in more than one region and therefore we
8 think we obtained a very good balance of performance, not
9 only between the regions but given experience with the
10 plants discussed at different points in time.

11 Finally, we made an attempt to enhance the
12 meeting's minutes and associated documentation to more fully
13 capture the nature of plant performance discussions and the
14 process for making Watch List determinations.

15 As noted, the minutes for the plants that are
16 discussed here today at the Commission briefing will be
17 released to the public.

18 For future Senior Management Meeting we plan to
19 continue incorporating changes to the process as lessons
20 learned become available for the implementation of the
21 process. These changes will include those that result from
22 the efforts AEOD is leading in this area, and I know there
23 has been one Commission meeting recently on AEOD efforts in
24 that area and there's more planned for the future.

25 I will summarize the overall results of the Senior

1 Management Meeting, after which the Regional Administrators
2 will discuss the facilities we have categorized as needing
3 agency-wide attention.

4 CHAIRMAN JACKSON: Mr. Collins, before you do
5 that, let me just ask you two general questions.

6 MR. COLLINS: Yes.

7 CHAIRMAN JACKSON: To what extent was risk
8 factored into the decision-making?

9 MR. COLLINS: We were provided the background
10 behind risk for the screening meetings and the Senior
11 Management Meeting.

12 We have a matrix that shows the IPE core damage
13 frequency information for the plants and at the screening
14 meetings as we discussed specific events that were brought
15 to light by the Regional Administrators or inspection
16 findings that revealed vulnerabilities as a result of
17 routine inspections or the AE inspections we used the risk
18 matrix here that is a result from the IPEs to determine the
19 sensitivity for risk in those areas.

20 At the Senior Management Meeting we discussed risk
21 in the overall context of is the plant an outlier and
22 specific areas of concern.

23 CHAIRMAN JACKSON: I think Commissioner McGaffigan
24 has a question.

25 COMMISSIONER MCGAFFIGAN: I would like to follow

1 up on the Chairman's question.

2 I noted in the book that you had all this
3 information about core damage frequency and large early
4 release frequency and all that, and I would like to explore
5 just how relevant is it?

6 If a plant has -- because we have heard in other
7 meetings we have a variation in quality of these
8 calculations that have been done -- if a plant is at ten to
9 the minus six core damage frequency as opposed to one that
10 is at ten to the minus four, does that influence your
11 decision-making as to, well, it's got two orders of
12 magnitude, we can be a little lighter on them, or not?

13 I mean what do these tables the discussion for
14 each plant as to what its IPE and IPEEE mean, what effect
15 does that have on any decision-making -- because I do worry
16 when it is in tabular form.

17 There is no little asterisk that says, oh, by the
18 way, the part of the Agency that worried about the quality
19 of the IPEs has deemed this one not as good as that one.

20 MR. MILLER: I can think of several of several
21 occasions where we discussed events and problems with
22 maintenance where the discussion centered around problems on
23 a system that had safety consequence, and so that kind of
24 discussion enters into --

25 COMMISSIONER MCGAFFIGAN: So on the system, but

1 the overall grade for the plant, does that matter?

2 MR. CALLAN: Hub Miller made the point that I was
3 going to make. That is exactly right.

4 We don't typically -- in fact, I can't think of an
5 instance where we change our perspective on a plant because
6 of an overall high or low core melt frequency, but if for
7 example a station blackout or loss of offsite power is a
8 major contributor to risk and the plant has systemic
9 problems over the years maintaining offsite power or the
10 status of their emergency diesel generators, those kinds of
11 insights do come up from time to time.

12 As Sam said, and the Chairman noticed this in her
13 remarks, her comments after sitting through the first day,
14 we don't do it in a systematic way and we need to improve
15 how we do that, but we do do that.

16 CHAIRMAN JACKSON: The second question is to what
17 extent or how is your decision-making influenced either by
18 the presence of new Managers or by licensee commitments?

19 MR. COLLINS: We are sensitive to the issue of the
20 unproven and we will acknowledge licensees' initiatives in
21 the area of programs, in the area of management
22 effectiveness.

23 As far as the categorization of a plant, we would
24 use the results of those initiatives, so given the example
25 where a plant has instituted programmatic changes or

1 organizational changes, that would be acknowledged but that
2 would not be given a large amount of weight as far as its
3 effectiveness until it's been measured by the inspection
4 program.

5 I think the minutes would reflect that.

6 MR. CALLAN: Let me expand on that briefly because
7 there is an example of a plant we'll discuss where we
8 don't -- the staff, the Senior Managers are not recommending
9 a change in status but we did form collectively a new
10 perspective because of the licensee's absence of making
11 substantial management changes or programmatic changes and
12 that influence the way we came out, but as Sam said, we went
13 to great lengths to base any decision to change an action or
14 status on demonstrated performance.

15 CHAIRMAN JACKSON: Commissioner Rogers?

16 COMMISSIONER ROGERS: Yes. I just wondered to
17 what extent did the content of the screening committee
18 deliberations, how did that get transmitted to the senior
19 managers at the senior management meeting itself? In other
20 words, did you start de novo with this list of plants that
21 came out of the screening committee or were there
22 observations at the screening meetings that could be carried
23 over into the senior management meeting itself?

24 MR. COLLINS: Yes. I think there are multiple
25 factors there. One is the majority of the senior managers

1 at the position of the office directors were at the
2 screening meetings.

3 The second is that the minutes of the screening
4 meetings are published.

5 The third is that the benefit of the screening
6 meeting is taken into consideration in the preparation for
7 the senior management meeting. And I noticed the books that
8 Commissioner McGaffigan brought in, those books are the --
9 some of the preparation that's done for the senior
10 management meeting and they contain the background
11 information from the screening meetings.

12 MR. REYES: If I could add to that, in our
13 presentation and discussion, we started with a little bit of
14 a flash back on the reasons why the plant was brought
15 forward to a senior management meeting using the minutes of
16 the pre-screening and the recollection of the people who
17 were there as a base discussion, and then we started the
18 discussion.

19 MR. CALLAN: There were three attendees at the
20 senior management meeting, at least three active
21 participants -- myself and two of my deputies, Hugh
22 Thompson, the deputy for regulatory programs, and Ed Jordan,
23 deputy for regulatory effectiveness -- who were not
24 participants in the screening meeting. So our first
25 involvement was at the senior management meeting, and so we

1 did not have that experience as a way of background.

2 Frequently, I would say -- I was going to say from
3 time to time, but frequently we asked questions relative to
4 the screening meeting discussions, and in a couple of cases,
5 quite frankly, we questioned the judgment of the screening
6 meeting as to why plants were passed through and challenged,
7 why are we talking about this plant, for example, and we had
8 a discussion of why the screening meeting made the judgment
9 they made, which I thought was a very healthy discussion.

10 COMMISSIONER MCGAFFIGAN: Could I just clarify?
11 You've mentioned now that the minutes of the screening
12 meetings are, I guess, in public document rooms. The
13 minutes of the senior management meeting are going to be in
14 a public -- you said they're public. I'm trying to
15 understand just how much is public.

16 CHAIRMAN JACKSON: What is in them?

17 COMMISSIONER MCGAFFIGAN: What is in these public
18 minutes?

19 MR. COLLINS: What I meant to convey -- perhaps I
20 didn't do it clearly -- is that the minutes of the senior
21 management meeting, not the screening meeting, but the
22 minutes of the senior management meeting for those plants
23 that are discussed here at the Commission meeting will be
24 placed in the PDR.

25 COMMISSIONER MCGAFFIGAN: But not the discussion

1 plants? Not the discussion plants?

2 MR. COLLINS: Correct.

3 CHAIRMAN JACKSON: I had a question in terms of do
4 you see any impact of the maintenance rule in identifying
5 maintenance, preventable failures, and is that folded into
6 your discussion at all?

7 MR. CALLAN: Chairman, off the top of my head, the
8 only instance where I thought the maintenance rule -- where
9 I can recollect the maintenance rule played a role was when
10 we encounter weaknesses in the licensee's implementation of
11 it or in maybe cases where they did a particularly good job
12 in implementing them. But I can't recall any instance where
13 the outcomes were discussed relative to the maintenance
14 rule.

15 MR. REYES: In the pro and con charts, you will
16 see that statement, and it could be pro or con depending on
17 what the findings were of the team inspection. So it was
18 using the dialogue, depending whether the findings were
19 positive or negative.

20 MR. CALLAN: Programmatic findings.

21 MR. REYES: Programmatic findings.

22 MR. CALLAN: Which wasn't your question. I
23 suppose that with the enhanced indicators, that would be
24 manifest.

25 CHAIRMAN JACKSON: Okay.

1 MR. COLLINS: Okay. At this time, I would like to
2 summarize the overall results of the recent senior
3 management meeting, after which the regional administrators
4 will discuss the facilities that we have categorized as
5 needing agency-wide attention or where we have taken action
6 as a result of the senior management meeting process.

7 Slide one, please.

8 Category 1 is for plants that are removed from the
9 NRC watch list. Indian Point 3 was placed in Category 1
10 during the June senior management meeting. As a result of
11 being categorized Category 1, that plant will be discussed
12 for the next two senior management meetings in order to
13 discern that the improving trend continues.

14 Slide two indicates Category 2 facilities.
15 Category 2 facilities are those plants whose operation is
16 closely monitored by the NRC. These facilities are Maine
17 Yankee, Salem 1 and 2, Crystal River, Dresden 2 and 3,
18 LaSalle 1 and 2, and Zion 1 and 2. There were no additions
19 to the Category 2 list at the June senior management
20 meeting.

21 Slide 3 indicates Category 3 facilities. Those
22 are plants that are shut down and require Commission
23 authorization to operate and that the staff monitors
24 closely.

25 Millstone 1, 2 and 3 remain in Category 3. As the

1 Commission is aware, the next quarterly meeting on Millstone
2 will be held on August 6th. Because Millstone's status will
3 be reviewed at that meeting, we did not plan to discuss the
4 Millstone units in detail today.

5 Slide 4, no plants requiring trending letters were
6 identified at the June senior management meeting.

7 CHAIRMAN JACKSON: Now, was there not a plant that
8 had a trending letter? Two that had --

9 MR. COLLINS: There are two plants that had
10 trending letters.

11 CHAIRMAN JACKSON: Right. And you're going to
12 discuss those specifically?

13 MR. COLLINS: Yes, I will.

14 CHAIRMAN JACKSON: Okay.

15 MR. COLLINS: As Slide 5 indicates, at the
16 previous meeting in January 1997, Clinton and Point Beach 1
17 and 2 were issued trending letters. At the meeting we just
18 completed, the senior managers determined that the
19 performance information for these plants did not indicate
20 that the adverse performance trends have been arrested, nor
21 did it indicate that the performance has continued to
22 deteriorate to the point that the plants should be placed on
23 the watch list. However, the status of Point Beach 1 and 2
24 and Clinton are different, and Mr. Beach will discuss those
25 during the presentation today.

1 MR. CALLAN: Excuse me. Chairman, this is the
2 instance that I referred to earlier where you asked the
3 question to what extent did the senior managers take into
4 account management changes and programmatic changes, and I
5 think the distinctions the staff made -- the senior managers
6 made between these two plants relied less on actual
7 performance, which we're not able to measure much at this
8 point, but more on derivative changes issues, specifically
9 the changes that we're seeing in management oversight and
10 the changes we're seeing in licensee programs. Those
11 distinctions caused us to take separate perspectives on each
12 facility.

13 CHAIRMAN JACKSON: Commissioner McGaffigan?

14 COMMISSIONER MCGAFFIGAN: I'm going to raise a
15 procedural issue with regard to these two plants that I
16 guess Commissioner Rogers was here for the history of. But
17 as I understand it, looking at the past, when a plant was in
18 a trending letter category, it continued to get a trending
19 letter until such time as it got a correction of adverse
20 trend letter, and that was a way to communicate with the
21 licensee.

22 We're still going to communicate with the licensee
23 because you're going to discuss them in the minutes of the
24 meeting with regard to these two plants that are going to be
25 put available to the public. It would strike me that -- I'm

1 not trying to go through history, but I -- why we don't also
2 do a letter to them summarizing -- it's all the same
3 materials -- when they remain on the trending list chart or
4 they're not getting a new trending letter, but they're --
5 they aren't getting a correction of adverse trend letter
6 either, whether we should be sending them a letter of some
7 sort. I guess the Commission made a decision at some point
8 not to continue to send trending letters. We did it to Quad
9 Cities and a couple other plants, is my recollection.

10 Would there be an advantage in giving folks a
11 six-month update as to how we think they're doing? I guess
12 we're going to.

13 MR. CALLAN: Well, first of all, Commissioner, had
14 we not decided that the Clinton station was deserving of a
15 diagnostic evaluation, we would not have discussed Clinton,
16 and then if we had not discussed Clinton, we would not have
17 discussed Point Beach.

18 We agonized quite a bit on whether -- how to do
19 this, and we felt that if we raised the issue of Clinton
20 needing a diagnostic, then that forced the question of Point
21 Beach. So we felt it necessary to discuss Point Beach only
22 in the context of why Clinton --

23 COMMISSIONER MCGAFFIGAN: Is getting a diagnostic
24 and they're not.

25 MR. CALLAN: -- is getting a diagnostic and Point

1 Beach isn't. And so that's the context of that. But all
2 that discussion was forced by the decision for the
3 diagnostic team inspection.

4 In response to the larger question about just the
5 strategy, as you correctly said, we've done it both ways,
6 and I think we all have preferences on which way is the
7 best. Perhaps it's appropriate to raise that to the
8 Commission for a decision.

9 MR. COLLINS: We have that item, specifically the
10 issuance of a trending letter, under evaluation in the
11 long-term assessment process. So we have picked up that.

12 COMMISSIONER ROGERS: I think there is an issue,
13 and it's really sort of the one that Commissioner McGaffigan
14 has touched on. My memory may be faulty, so I don't want to
15 say what I did in the past and what I didn't do in the past,
16 but what he said seemed to remind me of my own thoughts at
17 the time that to not send them any indication, even though
18 technically a trending letter should express something about
19 a trend, but if the trend is, you know, flat, that there's
20 no change, then you might make the argument that there's no
21 change and therefore no letter is required.

22 But I'm always uncomfortable about leaving a gap,
23 you know, that it -- what's the difference between our
24 coming to a conclusion that there hasn't been a sufficient
25 change to say that the trend, the adverse trend has been

1 corrected but doing nothing? I think that there is an
2 importance to establishing a record that the plant was
3 looked at, it wasn't found worthy to be taken off its
4 previous status. It hadn't gone up or down, but we're aware
5 of that.

6 I'm always a little uncomfortable when you have a
7 gap there in the situation, and I think it's always better
8 to try to have a continuous thread of attention; even though
9 it was discussed, that nevertheless there is a documentation
10 that says we sent them a letter and we said, you're not
11 going off because you didn't do a good enough job and you
12 didn't go down to really get into trouble, but we're still
13 watching you, you know? I feel more comfortable with that.

14 MR. COLLINS: I acknowledge that. I think by way
15 of background, it's important to acknowledge that we do
16 communicate performance to licensees because we have all
17 those other forums outside of the senior management meeting,
18 and the fact the plant was discussed is communicated to the
19 licensees, if not in a letter form, the regional
20 administrators take that initiative. But it is not
21 documented in the specific instance as required by the
22 management directive.

23 MR. CALLAN: But I think for the record, it's
24 important to say that since the trending letter concept was
25 initiated, which I think occurred in 1992, one of the

1 over-arching concerns has always been avoiding creating a de
2 facto category, a trending category.

3 A trending letter plant is not a category. They
4 are not in a category. They're being told that they're
5 trending. If they don't arrest the trend, they will end up
6 in a Category 1, 2 -- 2 or 3 watch list.

7 The concern I imagine is the sending of letters
8 every six months may contribute to a misconception that they
9 are in fact in a trending category.

10 COMMISSIONER ROGERS: I think that was in fact the
11 reason why --

12 MR. CALLAN: Yes.

13 COMMISSIONER ROGERS: -- the Commission took that
14 position, but I still felt a little uncomfortable about it.

15 CHAIRMAN JACKSON: You didn't want to create a de
16 facto Watch List.

17 COMMISSIONER ROGERS: Exactly.

18 CHAIRMAN JACKSON: Go on.

19 MR. COLLINS: As indicated in Joe's remarks
20 regarding Clinton, the Senior Managers concluded that
21 although the licensee has initiated short-term corrective
22 action needed for restart there was little evidence that
23 these measures will lead to lasting improvements.

24 Therefore, a diagnostic evaluation will be
25 conducted to more accurately assess the reason for Clinton's

1 performance decline.

2 In the case of Point Beach the Senior Managers
3 concluded that the actions taken reflect a comprehensive
4 improvement plan.

5 As I noted earlier, that is the departure between
6 those two trending plants.

7 COMMISSIONER McGAFFIGAN: Could I ask, on Clinton,
8 it's a diagnostic evaluation or an independent safety
9 assessment?

10 MR. COLLINS: That's correct.

11 COMMISSIONER McGAFFIGAN: And we did that at
12 Cooper?

13 MR. COLLINS: We did the --

14 COMMISSIONER McGAFFIGAN: Was that a successful
15 effort at Cooper?

16 MR. CALLAN: It was quite successful. In fact,
17 Ellis Merschoff, who is now Regional Administrator in Region
18 IV, was the team leader of the NRC's side of that, but one
19 of the biggest benefits from that approach is in our
20 estimation we obtain better buy-in from the plant staff and
21 from the utility.

22 Ellis, do you have --

23 MR. MERSCHOFF: Yes, sir. That was considered a
24 real success, both by the licensee and the NRC.

25 Briefly, it consisted of a large team of peers

1 from the industry, about 20 people, spending four weeks at
2 the site doing a very broad and deep review of the safety
3 performance at Cooper, and that effort was overseen at the
4 planning, implementation, and post-implementation phases by
5 a much smaller NRC team.

6 Both reports were released to the public and
7 resulted in improvement at Cooper.

8 COMMISSIONER ROGERS: And you are comfortable that
9 that is being sustained?

10 MR. MERSCHOFF: The Cooper improvement? Yes, sir.

11 MR. COLLINS: The reason, Commissioner, we
12 mentioned the diagnostic is that is the formal Agency tool.

13 Any departure from that would require of course
14 initiatives by the industry. That doesn't preclude them
15 being used, as Mr. Beach will indicate in his remarks.

16 CHAIRMAN JACKSON: You had more?

17 COMMISSIONER McGAFFIGAN: Well, I am going to get
18 on thin ice and --

19 CHAIRMAN JACKSON: It's okay.

20 COMMISSIONER McGAFFIGAN: -- and I want the folks
21 to tell me if -- Cooper, of course, got highlighted in the
22 GAO report we just got, and their criticism was that they
23 were discussed every Senior Management Meeting from 1991
24 until January, and I don't know what it is fair to say about
25 Cooper, if anything, at this point, given the criticism that

1 we have just received with regard to, you know, GAO's view
2 that we perhaps should have had them on the Watch List at
3 some point during that six-year period.

4 So for whatever --

5 MR. CALLAN: I think you can only speculate,
6 Commissioner, how Cooper would have been handled had there
7 not been the trending letter concept introduced at about the
8 time that Cooper's performance was starting to be manifested
9 by, you know, in tangible ways, and so -- but that is a case
10 where I mean we are probably asking the question because the
11 fact that Cooper was discussed is now public information in
12 a GAO report and I don't know whether it is fair to get
13 public information this time whether Cooper -- because
14 presumably we gave them permission or whether it is fair to
15 say whether they were discussed this time and if they
16 weren't discussed or if they were discussed how that
17 decision was made. Is that fair?

18 CHAIRMAN JACKSON: You can ask whatever you'd
19 like.

20 MR. COLLINS: Well, I think you are entering into
21 a matter of the bounds of the management directive.

22 The management directive can be changed. There
23 are a number of plants I think historically that are
24 discussed and updated at the screening meetings.

25 There is a basis, the minutes of the screening

1 meeting, which provide the reasons and a decision-making
2 process which moves the plant on and which does not move a
3 plant on.

4 If I understand your question correctly, I think
5 there's perhaps a policy issue that Staff can formulate and
6 provide a perspective on, and that would be if a plant is
7 brought up in a forum such as the GAO report then as part of
8 the response to the GAO report, would we indicate that the
9 information of why or why not the plant has reached a
10 threshold historically or where it is now.

11 I think that is a matter of responding to what is
12 on our plate rather than a matter of specific policy in the
13 management directive.

14 COMMISSIONER McGAFFIGAN: I will take that answer.

15 MR. CALLAN: I think just to summarize, I think in
16 the context of the issue before us, which is is a diagnostic
17 evaluation an appropriate regulatory tool for Clinton, I
18 think the record shows at least to our satisfaction that the
19 independent safety -- what was the official title of it?

20 MR. MERSCHOFF: It was called an SET, Safety
21 Evaluation Team.

22 MR. CALLAN: The independent industry effort was a
23 success at Cooper and it is that success that we would hope
24 to build on.

25 COMMISSIONER McGAFFIGAN: Our friends at GAO

1 didn't seem to give us much credit for it.

2 CHAIRMAN JACKSON: Why don't we go on?

3 MR. COLLINS: At this time I would like to just
4 review that Hub Miller, the Region I Regional Administrator,
5 will discuss Indian Point III, Maine Yankee, and Salem.

6 Luis Reyes, Region II Regional Administrator, will
7 discuss Crystal River, and Bill Beach, the Region III
8 Regional Administrator, will discuss Dresden, LaSalle, and
9 Zion.

10 That concludes my opening remarks.

11 I will turn the discussion over to Hub Miller at
12 this point if there's no more questions on the process.

13 CHAIRMAN JACKSON: There may be but we will get
14 you later.

15 MR. COLLINS: Fair enough.

16 MR. MILLER: Good morning, Chairman,
17 Commissioners.

18 Indian Point III was first placed on the Watch
19 List as a Category II plant in June of 1993. This action
20 was taken in light of the significant plant equipment and
21 staff performance issues that existed at that time.

22 Over the next three years, the New York Power
23 Authority took steps to improve performance, with mixed
24 results.

25 Numerous management changes were made and an

1 outage lasting about two years was conducted.

2 However, performance following startup in June of
3 1995 was still poor.

4 Several significant operator errors and equipment
5 problems caused the Power Authority to undertake another
6 extended outage.

7 This outage was completed in April of 1996.

8 While the plant operated nearly continuously and
9 human performance trends were positive after this outage,
10 that is through 1996 and into this year, a number of
11 equipment problems leading to power reductions and a number
12 of work control errors occurred.

13 Progress in the engineering area was slow in
14 responding to these problems.

15 From this, Senior Managers concluded in the
16 January meeting that improvement efforts were still
17 insufficient in some areas.

18 We determined an additional period of increased
19 monitoring was necessary.

20 Performance since the last Senior Management
21 Meeting has been good. Operator performance continued to
22 improve, particularly with respect to problem
23 identification, formality, and conduct of control room
24 activities.

25 A conservative approach to plant operations has

1 been taken. The number and significance of personnel errors
2 have declined. The station has demonstrated that through
3 effective control of plant evolutions and field activities
4 during two outages this year that significant progress has
5 been made in eliminating work control errors.

6 Early in the year, Management made a decision to
7 extend a forced outage to address a number of important
8 equipment problems which had been burdening operators.
9 Equipment performed well in subsequent plant operations,
10 indicating that maintenance and modifications completed in
11 that outage were effective.

12 Plant support activities such as radiological
13 protection have continued to be strong.

14 Quality Assurance and other oversight
15 organizations have been making positive contributions.

16 Systems engineers are more involved in plant
17 operations but substantial effort must continue to reduce
18 engineering backlogs and complete long-term improvement
19 plans in such areas as design basis documentation and set
20 point control. This work has appropriately prioritized and
21 additional resources have been dedicated to it.

22 The backlog of engineering work had an impact on
23 planning for the current refueling outage requiring
24 continuing close licensing management oversight of these
25 activities.

1 In summary, the NRC's inspection program and other
2 oversight activities have determined that licensee
3 management has substantially corrected the weaknesses and
4 underlying root causes that led to previous performance
5 problems at Indian Point III.

6 Management has established high standards of
7 performance, implemented improved self-assessment and
8 corrective action programs and upgraded the material
9 condition of the plant to enhance equipment reliability.

10 Therefore, the facility has been removed from the
11 Watch List.

12 It has been classified as a Category I plant and,
13 as Sam mentioned earlier, this is the designation for plants
14 which have been removed from the Watch List but which will
15 be discussed in the next two Senior Management Meetings to
16 assure performance improvements are sustained.

17 CHAIRMAN JACKSON: Commissioner Rogers?

18 COMMISSIONER ROGERS: No.

19 CHAIRMAN JACKSON: Did you make use of performance
20 indicator data from the last six performance -- the P.I.
21 data seemed to end with the fourth quarter of 1996.

22 MR. MILLER: Yes. The performance indicators that
23 we track from the NRC are lagging, but we did look at the
24 indicators that we have that aren't in the formal, you know,
25 document that's published by AEOD. Very definitely, we

1 looked at those things that, you know, include safety system
2 actuations, vents and that sort of thing that are -- that
3 will be ultimately reflected in the performance indicators
4 when they are published.

5 CHAIRMAN JACKSON: And you are satisfied with
6 those?

7 MR. MILLER: Yes, the judgment that they have --

8 CHAIRMAN JACKSON: Are we giving more weight to
9 the more recent data; that is, the last six months?

10 MR. MILLER: I think it's a collective thing,
11 Chairman. I think it goes back to the period that really
12 started after the outage that ended at the beginning of
13 1996, and we saw improvement over the period of last year
14 and into this year.

15 At the last senior management meeting, there was a
16 lot of discussion about the improvement, and while we saw
17 improvement last time, we saw those nagging problems in
18 those isolated areas that I mentioned, were control, field
19 activities, and then the impact that a number of equipment
20 problems had on the plant, power reductions and the like,
21 and so we identified in the last meeting, you know, what we
22 needed to be looking at this period to make a judgment, and
23 it has been our judgment that they have made sufficient
24 progress.

25 CHAIRMAN JACKSON: Now, maybe this would require

1 evaluation, refinement and potential use of something like
2 the Arthur Andersen algorithm, but is it possible perhaps
3 graphically to depict data to show more clearly the change
4 in performance from one senior management meeting to the
5 next, say for this particular licensee relative to some of
6 the categories you've discussed and others?

7 MR. MILLER: I think some of the indicators can be
8 tracked, and personnel errors is one. This licensee does a
9 pretty good job of tracking personnel errors at a low
10 threshold and also putting personnel errors in context, you
11 know, number of activities, number of hours, and the like.
12 So we are aware of the indicators that they tracked that we
13 don't keep from the NRC side, but some of them can be
14 depicted graphically.

15 CHAIRMAN JACKSON: Well, I think it would be
16 helpful, when you've laid out the various categories that
17 you discussed that gave you the reasons for removing them,
18 and it derives from the matrix that you use to actually have
19 the supporting data presented in a form where it's easy to
20 see that there has been a change.

21 Why don't you go on.

22 MR. MILLER: Let me next discuss Maine Yankee.

23 Maine Yankee was first discussed at the senior
24 management meeting in January 1997. A number of significant
25 deficiencies had come to light, largely as a result of an

1 independent safety assessment team which conducted a review
2 during the latter half of 1996.

3 In December of last year, the plant was shut down
4 when Maine Yankee discovered cable separation problems in
5 several safety related systems. Since the last senior
6 management meeting, Maine Yankee remained shut down to
7 address this problem and other numerous plant equipment and
8 human performance problems.

9 Under a management services agreement with Entergy
10 Nuclear, Incorporated, a new management team was formed at
11 the site. Comprehensive assessments were undertaken to
12 determine the full extent and root causes of problems that
13 may exist. This included follow up on the issues previously
14 identified by the integrated safety assessment team.

15 Performance improvement plans were expanded
16 considerably by the new management teams. These plans
17 identified both near-term actions to be completed before
18 plant restart and needed long-term improvements.

19 New corrective action and self-assessment
20 processes were instituted, and while a significant lowering
21 of the problem reporting threshold was observed,
22 implementation has been somewhat inconsistent in the
23 start-up phase of these programs.

24 Management has established higher performance
25 standards and has taken a more conservative approach to

1 analysis of problems and decisionmaking. A decision was
2 made to enter the planned 1997 refueling outage about nine
3 months early to expedite the equipment problem discovery
4 process. Some progress was made in repairing degraded plant
5 equipment during the outage.

6 Plans for plant modifications necessary to address
7 a number of significant design vulnerabilities were in
8 various stages of development when a decision was made
9 recently by the board of directors to reduce outage
10 activities. The board took this action in concert with a
11 decision to reexamine the plant future.

12 Personnel performance is still inconsistent, as
13 evidenced by errors made during recent defueling operations,
14 and so continued management attention is needed to reinforce
15 new performance standards.

16 Significant additional work must be completed
17 before plant restart. The senior managers determined
18 continued increased agency attention is needed to monitor
19 improvement efforts. As a consequence, Maine Yankee
20 continues to be designated a Category 2 facility.

21 CHAIRMAN JACKSON: Sometimes plants get into
22 trouble because they're too insular or too inward-looking.
23 Is there industry guidance available on what are the
24 characteristics of a good self-assessment program?

25 MR. COLLINS: I think there are a number of

1 initiatives in those areas. I would have to ask the staff
2 as far as the specific reg guides we have available in that
3 area. We do spend a lot of time in the inspection program
4 looking at the corrective action program. I think there are
5 certainly industry initiatives as far as INPO and other
6 entities are concerned.

7 I would be hesitant to say that we have a
8 template, if you will, that we're looking at. We look at
9 the attributes, the results of each individual program.
10 There are a number of specific attributes as far as tracking
11 and priority and timeliness and measuring the effectiveness
12 of corrective action programs which we review in the
13 subjective form as far as results are concerned, and I think
14 that's about as far as we go.

15 CHAIRMAN JACKSON: Commissioner Rogers.

16 COMMISSIONER ROGERS: Well, you know, it would
17 seem to me that this is a time when -- I'm not sure what NRC
18 can do about it, but a time when the morale of the staff at
19 that place is probably getting pretty low, and a time when
20 if it is going to continue, what happens now has to be done
21 with just as much care and attention to detail as normally.
22 It's a time when I think it's important to watch very
23 carefully that somehow or other, nothing is allowed to slip
24 that might very well be called upon later if the decision is
25 to continue that plant.

1 So there's a period here of great sensitivity, I
2 would think, to the safety culture at the plant and the
3 commitment of the folks that are working there to not allow
4 something to degrade to a point -- and unobserved so that at
5 a later time, if the decision is to start up, that you're
6 not caught with a whole collection of imperfect systems that
7 start to tell you that.

8 MR. MILLER: We have been very sensitive to that,
9 and there is the issue that you're talking about of making
10 sure that the work that's done now doesn't slip to the point
11 where things -- you know, that errors are made and they're
12 hard to detect happen at this point, and if they want to
13 resume operations later, you will have a difficult time
14 picking that up.

15 But the other concern is something that we saw at
16 Haddam Neck, honestly, last year, after a decision was made
17 there, and there was an impact, I think, of the decision at
18 that plant and there was a significant event that occurred.
19 So in the defueling operations that I've talked about
20 recently, we had a heightened level of monitoring of those
21 activities to assure that the natural impact that occurs on
22 morale did not, you know, work back to the actual operations
23 of the plant, and I'm happy to say they've defueled the
24 reactor now and they did those evolutions.

25 There were some errors that I talked about. The

1 new management team I thought did a good job of reacting to
2 those sharply to avoid them from turning into something that
3 was wider.

4 CHAIRMAN JACKSON: Commissioner Diaz?

5 COMMISSIONER DIAZ: I have no questions.

6 CHAIRMAN JACKSON: Commissioner McGaffigan?

7 Why don't you go on.

8 MR. MILLER: Salem. Salem was first discussed
9 during senior management meetings in 1990 and 1991.
10 Performance problems surfaced again, leading to discussion
11 of the plant at the June 1994 meeting.

12 As most notably shown by a complicated reactor
13 trip, safety injection and plant transient in April of 1994,
14 significant operator performance, equipment reliability, and
15 corrective action problems existed at the plant.

16 Initial efforts to address these problems were not
17 successful and eventually both units were shut down in mid
18 1995 and they have remained shut down since that time.

19 While in the last senior management meetings,
20 senior managers noted progress was being made by Public
21 Service Electric & Gas in correcting problems, we concluded
22 Salem should be designated a Category 2 watch list facility.
23 This was appropriate since significant increased agency
24 monitoring of Salem was actually occurring in light of the
25 pervasive, longstanding nature of the problems that were

1 being addressed by the licensee.

2 Since the January meeting, Public Service
3 continued to make progressing in addressing both equipment
4 and human performance issues that led to the dual unit
5 shutdown. The outage on unit 2, which has resulted in
6 extensive refurbishment and modification of both safety
7 related and balance of plant systems, is nearing completion.
8 We'll be meeting this afternoon on that project.

9 Efforts to address operator workarounds have been
10 effective. Public Service is well along in completing a
11 comprehensive pre-start up test program intended to assure
12 repair work has been effective. The unit 2 steam generator
13 replacement project is proceeding well.

14 Station management has continued to strengthen
15 corrective action programs. Thresholds for problem
16 reporting is low and root cause assessments are usually
17 strong. Self-assessment activities are effective and
18 management has normally taken appropriate action as problems
19 are brought to light.

20 Plant operators continue to exhibit a strong sense
21 of plant ownership and conservative decisionmaking. The
22 plant is in the early stages of implementing an improved
23 station-wide planning and scheduling process. The number
24 and significance of personnel errors have declined. This
25 stems in part from extensive retraining and requalification

1 programs conducted during the outage for operators and
2 maintenance technicians to both reinforce fundamental skills
3 and establish higher safety standards.

4 The engineering staff also has received
5 significant additional training. The magnitude of
6 engineering efforts to support the dual unit outage has been
7 large. Engineering performance has generally been good.

8 Following up on NRC inspection findings, Public
9 Service conducted an extensive FSAR and licensing basis
10 verification effort.

11 While a strong management team has been in place
12 for most of the dual unit outage, effective operation of the
13 facility at power has yet to be demonstrated. For this
14 reason, the senior managers concluded that continued
15 increased attention to Salem activities is necessary. As a
16 consequence, Salem will remain a Category 2 facility.

17 CHAIRMAN JACKSON: How long a period of full power
18 operation would we require?

19 MR. MILLER: I don't think that there's anything
20 in our guidance on that. It will be a judgment call
21 ultimately.

22 CHAIRMAN JACKSON: Okay.

23 MR. CALLAN: The guidance, Chairman, in the
24 removal matrix of management directive 8.14 talks about the
25 period of sustained operation with acceptable performance,

1 and that has been as short as one senior management meeting
2 cycle if there's an opportunity for a licensee to perform --
3 to operate and perform during that period.

4 In the case of Indian Point 3, which was briefed
5 earlier, there were some fits and starts. We never -- it
6 took us, what, two or three senior management cycles before
7 we were able as a group to have a consensus that we had seen
8 a period of sustained performance. So that would be the
9 other end of the spectrum.

10 CHAIRMAN JACKSON: We are going devote a full
11 Commission meeting to this plant this afternoon. We don't
12 need to spend that much time, but I do want to offer the
13 Commissioners an opportunity.

14 Okay, why don't you go on then.

15 MR. COLLINS: That completes the remarks of Mr.
16 Miller.

17 At this time I would like for Luis Reyes to
18 discuss Region II plants.

19 MR. REYES: Good morning, Chairman Jackson and
20 Commissioners. I will be briefing you on Crystal River.

21 Crystal River 3 is a single Babcock & Wilcox unit
22 operated by Florida Power Corporation. Declining
23 performance at Crystal River was first discussed during the
24 June 1996 senior management meeting. Performance concerns
25 at Crystal River 3 discussed involve Florida Power

1 Corporation's mishandling of several design issues, improper
2 interpretations of NRC regulation, and weaknesses in
3 operator performance, corrective actions, and management
4 oversight.

5 Crystal River was classified as a Category 2 plant
6 after the January 1997 senior management meeting. Since the
7 January 1997 senior managers' meeting, Crystal River has a
8 new management team that has been effective in resolving the
9 engineering and human performance issues previously
10 identified. A comprehensive recovery plan which includes
11 milestones and measurements of accomplishments has been
12 implemented.

13 The unit was shut down in September of 1996 and
14 continues in a shutdown condition. Efforts to complete the
15 extent of condition review, system modifications, and
16 improvements in the material conditions inside containment
17 continue, and will require extensive licensee and NRC
18 attention prior to the unit startup.

19 The final resolution of these issues warrant
20 continued increased NRC attention from both headquarters and
21 the region, and therefore the senior managers decided that
22 Crystal River 3 should remain a Category 2 plant.

23 I'll be glad to answer any questions on Crystal
24 River.

25 CHAIRMAN JACKSON: Commissioner Rogers.

1 COMMISSIONER ROGERS: No.

2 CHAIRMAN JACKSON: Commissioner Diaz.

3 COMMISSIONER DIAZ: No.

4 CHAIRMAN JACKSON: Commissioner McGaffigan.

5 COMMISSIONER MCGAFFIGAN: No.

6 Thank you.

7 MR. COLLINS: At this time I would ask Bill Beach,
8 the Regional Administrator of Region III, to discuss
9 Dresden, LaSalle, and Zion facilities.

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

11 Before discussing the plants at this last meeting
12 in January and at our April meeting with Commonwealth
13 Edison, we told the Commission we would keep you informed
14 regarding the actions Commonwealth Edison was taking and we
15 were taking in response to the NRC's 10 CFR 50.54(f) letter
16 requesting information as to why the NRC should have
17 confidence that Commonwealth Edison Company can operate all
18 six of its nuclear stations while sustaining performance
19 improvements at each one.

20 I'm going to take just a minute and go over what
21 we've done in the last couple of months since that last
22 meeting. Commonwealth Edison since that last meeting has
23 continued to take actions to strengthen its corporate
24 oversight of the six nuclear stations. Most notably
25 Commonwealth Edison has put into place peer groups and

1 implemented a performance indicator program. The purpose of
2 the peer groups is to enhance communications and share
3 insights among the six stations, find consistent solutions
4 to common problems, and most importantly, improve
5 performance through a consistent process and program across
6 the nuclear division.

7 Twenty-five performance indicators have been
8 selected to drive improvement efforts. Seven are typical
9 indicators that we use. The remaining 18 are targeted for
10 specific areas such as workarounds, out-of-service errors,
11 temporary alterations, percent rework, corrective actions,
12 and percent floor space contaminated, to name a few.
13 Corporate audits are also being conducted to ensure
14 performance indicators are not being managed.

15 In addition to these monitoring and assessment
16 functions, the oversight functions are also being
17 strengthened. Although it is early in the implementation
18 phase, indications are there is the potential for
19 identifying noted differences in plant performance and
20 trends that deviate from average industry performance. Some
21 worthwhile insights have already been obtained in the area
22 of work control.

23 Since we last met, our staff has formed a
24 performance oversight panel to provide an integrated NRC
25 assessment of Commonwealth Edison's nuclear safety

1 performance, particularly focusing on sustained performance
2 improvements at each site and the effectiveness of the
3 corporate oversight initiatives. The panel is chaired by
4 myself, includes senior managers and staff from the Office
5 of Nuclear Reactor Regulation, the region, and other offices
6 as appropriate. The panel plans to meet with Commonwealth
7 Edison Company once every six to eight weeks to discuss the
8 status of performance improvement initiatives. These
9 meetings also provide the opportunity to discuss any
10 inconsistencies between findings from the NRC's inspection
11 program and the Commonwealth Edison Company corporate
12 oversight program. These meetings have been and will be
13 open to the public, and the meeting minutes and handouts
14 will be docketed.

15 Now regarding the plant discussions, I'll go
16 directly to Dresden, unless you have questions.

17 CHAIRMAN JACKSON: I just had one general
18 question. For Com Ed's plants, to what extent was overall
19 corporate performance included in your evaluation of
20 individual plant performance?

21 MR. BEACH: I think particularly with Dresden that
22 will come up.

23 CHAIRMAN JACKSON: Did you want to make a comment,
24 Mr. Callan?

25 MR. CALLAN: I think we ought to discuss this

1 after we finish Dresden, because it did play an important
2 role.

3 CHAIRMAN JACKSON: Okay. No problem.

4 MR. BEACH: Dresden was first placed on the NRC
5 watch list as a Category 2 facility in June of 1987, and
6 removed from the watch list in December of 1988. Dresden
7 was again placed on the watch list in January of 1992, where
8 it still remains, although over the past six months overall
9 performance has continued to improve.

10 The NRC conducted an independent safety inspection
11 in the fall of 1996 that concluded that safety performance
12 had significantly improved in plant operations, while the
13 level of improvement in engineering had not resulted in
14 fully effective problem identification and resolution. A
15 confirmatory action letter was issued in November of 1996 to
16 confirm the actions Dresden is taking to address the
17 engineering deficiencies identified during the independent
18 safety inspection. Our assessment of the station's
19 corrective action under the confirmatory action letter is
20 still in process.

21 In April of this year to complete the independent
22 safety inspection a maintenance inspection was performed
23 utilizing personnel from the Office of Nuclear Reactor
24 Regulation, Region IV, and Region III during the Unit 3
25 refueling outage. The results of the inspection were

1 consistent with other NRC inspections that confirm that
2 progress in improving maintenance continues to be made. The
3 radiological protection program was noted to be improving
4 with much more work being performed with a lower station
5 dose. However, some problems were identified in the
6 planning and coordinating of work, and in surveillance
7 testing, an area where the routine inspection program is
8 identifying some problems with procedural adequacy and
9 procedural adherence.

10 In the area of operations, recent reactor startups
11 and day-to-day operational activities have been performed
12 well. The number of operator errors has been consistently
13 declining. Overall performance in this area continues to be
14 strong. Unit 2 operated for 223 days until it shut down on
15 April 10. The recent Unit 3 outage has shown Dresden's
16 ability to accomplish a large amount of work in a planned,
17 systematic manner. Significant improvements in the material
18 condition of the plant were made by addressing and resolving
19 some longstanding issues such as the cleaning of the reactor
20 bottom head drain, repairing the reactor vessel shroud, and
21 upgrading the station air compressors. The number of
22 operator workarounds and maintenance backlogs are
23 decreasing, as is the total number of corrective-action
24 items.

25 However, notwithstanding these improvements, the

1 plan is still being challenged by emergent equipment
2 deficiencies. Four Unit 2 shutdowns occurred between April
3 10 and May 24 because of material-condition and/or
4 work-control problems.

5 With the exception of some surveillance testing
6 weaknesses, there was improved performance in the area of
7 engineering support to the station. Greater engineering
8 involvement in resolving material condition deficiencies
9 resulted in some equipment performance improvements.
10 However, emergent issues in the large engineering backlog
11 continue to challenge the engineering organization. Design
12 control process improvement initiatives and the aggressive
13 actions the station has taken to address the findings of the
14 independent safety inspection adds to the significant
15 engineering workload. A design engineering assurance group
16 was established to provide oversight and guidance for
17 engineering activities, with the ultimate goal of improving
18 the quality of engineering activities.

19 In summary, the senior managers concluded there
20 has been substantial improvement in the area of operations,
21 and that the most recent outage on Unit 3 was well executed
22 and improved the material condition of the unit. However,
23 there are significant challenges in the engineering area,
24 where a number of design weaknesses still exist.

25 The senior managers were most concerned about the

1 potential for continued operational challenges because of
2 emergent equipment deficiencies, as evidenced by the four
3 Unit 2 shutdowns that occurred between April 10 and May 24.
4 Further, the senior managers also discussed the need to
5 consider Dresden's performance in light of the Commonwealth
6 Edison corporate performance plan. Given the cyclical
7 history of performance at Dresden, performance improvements
8 at Dresden need to be assessed with the understanding that
9 they will not be impacted by a corporate focus on the other
10 plants.

11 The Senior Management discussed extensively
12 removing Dresden from the Watch List. Given the observed
13 performance improvements, the Senior Managers concluded that
14 on balance because of Dresden Station's performance history
15 it was prudent to retain Dresden on the Watch List as a
16 Category II facility.

17 CHAIRMAN JACKSON: So what is the next step for
18 Dresden?

19 MR. BEACH: I am optimistic that if this outage
20 was as we think it is and it did in fact improve material
21 condition to the extent that we think it did, and Unit 2
22 performs well, which has been proven, that there should be a
23 period of sustained performance over the next six months to
24 consider taking Dresden off the Watch List in the next
25 Senior Management Meeting.

1 CHAIRMAN JACKSON: Any comments?

2 MR. COLLINS: I think I would just elaborate
3 slightly on Bill's comments.

4 This is a situation where we use a removal matrix.
5 Certain areas in a removal matrix were weighted based on the
6 history of the plant. They are currently as we hear, unless
7 it's changed in the last couple hours, in a period of dual
8 unit operation.

9 They have performed a successful outage, we
10 believe, but because of the history of the plant, there's at
11 least two factors that the Senior Managers were sensitive
12 to.

13 One is the emergent work issue and a sustained
14 period of operation would provide for a proof period, if you
15 will, for the reliability of equipment.

16 The second is the continued corporate support and
17 stability at the station which Senior Managers believe is
18 necessary in order to continue with the improving trend.

19 CHAIRMAN JACKSON: Thank you. Commissioner
20 Rogers.

21 COMMISSIONER ROGERS: Where did you pick up design
22 weaknesses? What systems evidenced these kinds of problems?
23 Is this a configuration control problem from the past or was
24 this, are these design weaknesses from the very beginning of
25 the plant's history?

1 MR. BEACH: It is probably a combination of all of
2 the above, Commissioner.

3 The initiation was the independent safety
4 inspection that was led by Sam, and the licensee has
5 initiated a number of actions in response to the ISI and
6 those actions include going back looking at original
7 calculations, looking at design basis documents, and also
8 looking at big configuration control problems.

9 They are finding a number of issues.

10 Historically at the station -- I am not sure of
11 the timing -- Hub might know better than I do -- but I think
12 it wasn't until two to three years ago that they were able
13 to get the design basis documents because they were retained
14 at the architect engineer, so essentially what they are
15 doing is a very extensive review of all of those things,
16 with using sampling, conducting audits of the calculations,
17 conducting the audits of contractors who are reviewing the
18 calculations, and they are finding some problems as well in
19 the review of the audits of the calculations, so it is a
20 pretty extensive effort in a lot of areas.

21 COMMISSIONER ROGERS: What about the material
22 condition problems? What is the nature of those?

23 What kinds of systems are involved there?

24 MR. BEACH: One problem was -- I can discuss all
25 of them. One was a Gerlin circuit breaker issue that was

1 identified as Quad Cities.

2 At Dresden it had been put on an action request,
3 which is a first tier document leading to a work request.

4 The system engineer did not understand the
5 significance of that and cancelled the action request and
6 therefore when the problem was found at Quad Cities it
7 necessitated a shutdown at Dresden as well.

8 One of the problems was a tachometer on the NG set
9 was oscillating, and the reason it was oscillating is
10 because a set screw was improperly set, and that was a
11 maintenance issue because of a procedural problem that
12 didn't specifically specify how the set screw should be set.

13 MR. CALLAN: Excuse me. I want to clarify
14 something, and correct me if I am wrong, Bill.

15 The engineering arguments were not compelling in
16 the Senior Management discussions about Dresden. They were
17 not focused on.

18 We asked ourselves the tough question -- if
19 Dresden were not a Commonwealth plant, and if you just
20 looked at Dresden's performance objectively, would there be
21 a basis for removing them from the Watch List?

22 My sense is that the answer was close. It was a
23 close call. My sense is that the Staff would have opted to
24 keep them on the Watch List largely because of the
25 operational problems during that one-month period, the

1 shutdowns and the operational challenges, not the
2 engineering issues.

3 When you superimpose on that though the history,
4 as Sam mentioned, the history and the corporate issues, then
5 the decision became less agonizing. That is how I would
6 characterize it, but the engineering concerns were not
7 compelling.

8 We typically would not weigh old design issues
9 heavily in deciding whether a plant should go on or go off
10 the Watch List. The Agency policy, as you know, is to
11 encourage licensees to ferret out old design issues and our
12 enforcement policy essentially rewards that type of
13 behavior.

14 MR. COLLINS: I think the difference there,
15 Commissioner, is twofold. One is that the engineering
16 issues, while not unique to Dresden, they were Commonwealth
17 engineering issues.

18 The confirmatory action letter and the corrective
19 actions that Bill mentions are corporate-wide. They are not
20 unique to Dresden.

21 The second point would be in response to your
22 question. The material condition of the plant is good to
23 very good, but the emergent work or the work practices is
24 what manifests itself in the operational challenges to the
25 plants, but the condition of the equipment itself is

1 typically very good with the exception of an in-leakage
2 issue they have in some of the rooms as far as groundwater
3 is concerned.

4 CHAIRMAN JACKSON: Commissioner Diaz would raise a
5 question.

6 COMMISSIONER DIAZ: Excuse me, in what sense did
7 it manifest some weakness or some problem?

8 MR. COLLINS: It is a challenge to the operators.
9 The issue that Bill raised with the two examples
10 of work practices or work control manifested themselves in
11 either shutdowns to the plant to correct, or in event
12 response to the operators.

13 The operators themselves performed well. It is
14 the emergent work as the result of past practices or current
15 work control that is continuing to challenge the plant.

16 Is that a fair reading, Bill?

17 MR. BEACH: Yes.

18 COMMISSIONER DIAZ: You mean that the work that
19 now needs to be done in any industry to maintain the
20 industry functional, do you think that creates a new
21 challenge to them, is that what you are saying?

22 MR. COLLINS: No. There is a distinction, I
23 believe, with Dresden. You draw the correlation to any
24 plant. Dresden is not any plant --

25 COMMISSIONER DIAZ: No, but any plant needs work.

1 MR. COLLINS: Well, no. Not the type of work I
2 believe that Dresden has warranted in the past because of
3 the accumulation of issues over years and the preponderance
4 of equipment issues --

5 COMMISSIONER DIAZ: The type of work rather than
6 that it is an emergent work, so some new work has some
7 special significance, is that what it is?

8 MR. COLLINS: Well, I am characterizing new work
9 and emergent work as the same.

10 COMMISSIONER DIAZ: Right, but the work is some of
11 special quality. It is not just standard work that happens
12 in any plant --

13 MR. COLLINS: Unexpected work.

14 COMMISSIONER DIAZ: Unexpected work?

15 MR. COLLINS: Yes.

16 CHAIRMAN JACKSON: With unexpected consequence?

17 MR. COLLINS: Yes, and of course where we cross
18 that line into a regulatory concern is where it results in
19 an event or a transient or a challenge to the operators.

20 CHAIRMAN JACKSON: Is that the kind of -- then
21 that's the kind of emergent work outcome you are focusing
22 on?

23 MR. COLLINS: Yes, and that is the type of area we
24 believe we need to see improvement --

25 CHAIRMAN JACKSON: Okay.

1 MR. COLLINS: -- on a sustained basis in order to
2 support the removal matrix.

3 CHAIRMAN JACKSON: Okay. Any further questions?
4 Mr. McGaffigan?

5 COMMISSIONER MCGAFFIGAN: No.

6 MR. BEACH: We'll move to LaSalle.

7 CHAIRMAN JACKSON: Let me ask you one question
8 about Dresden.

9 There was a recent inspection report, 97-007 --
10 Double 07 --

11 [Laughter.]

12 CHAIRMAN JACKSON: -- were the findings from that
13 inspection report included in your assessment, do you know?

14 MR. BEACH: Could you just tell me what -- some
15 characterization of the report?

16 CHAIRMAN JACKSON: It's all right. I'll talk to
17 you about it. It's a lot of different things that showed up
18 in that report.

19 MR. BEACH: Okay.

20 CHAIRMAN JACKSON: Write it down though.

21 MR. BEACH: Yes, ma'am. Which one was that?

22 CHAIRMAN JACKSON: 007.

23 MR. BEACH: 96?

24 CHAIRMAN JACKSON: 97-007.

25 MR. CALLAN: Now all the RAs are going to come

1 into this briefing with all their inspection report numbers
2 tabulated.

3 MR. BEACH: Normally I have that, Joe.

4 Okay, LaSalle.

5 LaSalle was placed on the Watch List following the
6 January, 1997 Senior Management Meeting.

7 A June, 1996 risk significant event involving the
8 injection of large quantities of expandable foam sealant
9 into the safety-related service water tunnel reflected that
10 work controls had broken down, revealed previously
11 unidentified material condition problems, and disclosed
12 significant engineering weaknesses in support of plant
13 operations.

14 After the significance of the problems at LaSalle
15 Station were recognized, Commonwealth Edison Company shut
16 down both units in September of 1996. The units currently
17 remain shut down while the LaSalle Station implements a
18 comprehensive restart action plan to address a variety of
19 human performance deficiencies and hardware problems.

20 Management has set clear goals at the station and
21 is engaging the workforce.

22 In this regard, Management is implementing high
23 standards to deal with licensed and non-licensed operator
24 performance issues.

25 A major aspect of the restart plan is focused on

1 the upgrade of training and operating department standards.

2 Critical simulator evaluations of operator
3 performance during high intensity training identified
4 several generic operator weaknesses, particularly in the
5 implementation of abnormal operating procedures.

6 The licensee has suspended some licensed reactor
7 operators and senior reactor operators from licensed duties
8 pending remediation training.

9 Positive results in limited areas are evident for
10 some LaSalle improvement initiatives implemented during the
11 current extended plant shutdown. Lately, efforts to
12 approach work in a more systematic controlled manner reflect
13 a plant management emphasis on a conservative operating
14 philosophy focused on plant safety.

15 The licensee is actively identifying and seeking
16 resolution to plant material condition problems. Functional
17 system reviews are particularly noteworthy, and have
18 resulted in the identification of a number of design issues.
19 The licensee is undertaking the review of 48 systems using
20 predominantly expertise. More significant actions to
21 address engineering performance has included enhanced
22 training and formation of an engineering assurance group
23 similar to Dresden.

24 Challenges though remain in a number of areas.
25 There are still some examples of an inconsistent

1 implementation of the design change process. There are
2 still some problems with radiation worker practices, and
3 although decreasing, there is still a large amount of
4 contaminated areas. Backlogs are high and are increasing
5 because of the issues identified as a result of the system
6 functional reviews. Over 200 modifications are scheduled to
7 be completed prior to the restart of the units. Although a
8 number of problems are being identified, the
9 corrective-action program improvements for effective problem
10 resolution have not yet been tested in a high-work-activity
11 environment.

12 In summary, the senior managers recognize the
13 extensive improvement initiative referenced in LaSalle's
14 restart plan. However, convincing evidence that overall
15 safety performance is improving is not yet apparent. Given
16 that performance improvements have been limited and that
17 both units remain in a shutdown condition, the senior
18 managers concluded that LaSalle County station should remain
19 on the watch list as a Category 2 facility.

20 CHAIRMAN JACKSON: Commissioner Rogers?

21 COMMISSIONER ROGERS: No.

22 CHAIRMAN JACKSON: Commissioner Diaz?

23 COMMISSIONER DIAZ: I have no questions.

24 CHAIRMAN JACKSON: Commissioner McGaffigan?

25 COMMISSIONER MCGAFFIGAN: No.

1 CHAIRMAN JACKSON: Please go on.

2 MR. BEACH: Zion. The Zion nuclear power station
3 was placed on the NRC watch list for the second time
4 following the January 1997 senior management meeting. It is
5 now apparent that the licensee was unable to maintain its
6 course of improvement after being removed from the NRC watch
7 list as a Category 2 facility in January of 1993. Over the
8 past 6 months some significant operational issues have
9 occurred. An augmented inspection team dispatched to review
10 a February 17 event identified significant human performance
11 deficiencies involving both the operating crew and licensee
12 management at the station. Of particular concern was the
13 breakdown in command and control by operation supervision,
14 inadequate communications between all levels of the
15 operations department, the failure of management to preplan
16 the shutdown evolution, and licensed-operator knowledge and
17 training deficiencies that were manifested during this
18 event.

19 A March 1997 reactor vessel voiding event also
20 demonstrated the previously identified operational and
21 corrective-action program weaknesses were not effectively
22 addressed. The licensee in response to this event clearly
23 developed an intensive improvement plan. This plan included
24 an assessment of each licensed and nonlicensed operator to
25 determine if the individuals possessed the qualifications

1 and attributes that licensee management considered necessary
2 to operate the plant safely. Based on the results of this
3 assessment process, the licensee selected a core group of
4 operators for an enhanced training program. This group is
5 now focused on the restart of Unit 2.

6 Performance in the area of maintenance showed
7 limited improvement over the last six months. Maintenance
8 backlogs are high, and a number of equipment problems
9 occurred in the period, several of which were related to the
10 emergency diesel generators. A failure of a system
11 auxiliary transformer caused a loss of offsite power where
12 there were a number of work coordination problems associated
13 with the transformer repair and electrical bus restoration
14 activities.

15 Some limited improvement was noted in engineering
16 over the period. While the engineering organization
17 identified several design issues, testing deficiencies, and
18 configuration control discrepancies, engineering personnel
19 did not always recognize and appropriately evaluate degraded
20 equipment conditions. The licensee is now performing
21 restart system affirmation reviews to assess system
22 readiness in preparation for the restart of Unit 2.

23 Problems continue to be evidenced in radiation
24 protection, although improvement was observed. Access to
25 safety-related equipment is improving because of ongoing

1 efforts to reduce the extensive amount of contaminated
2 areas.

3 The senior managers recognize the improvement
4 initiatives referenced in Zion's restart plan and the
5 efforts to enhance operator training and operator
6 performance. Improvement plans to address corrective action
7 weaknesses were also recognized. The senior managers did
8 note that the number of allegations filed at the plant have
9 increased substantially. However, senior managers concluded
10 that because of the continued human performance problems,
11 particularly in operations, the recurrence of equipment
12 problems due to the failure to implement fully effective
13 corrective actions, and questions about the current work
14 environment, Zion should remain on the watch list as a
15 Category 2 facility.

16 CHAIRMAN JACKSON: Commissioner Rogers?

17 COMMISSIONER ROGERS: No.

18 CHAIRMAN JACKSON: Commissioner Diaz?

19 COMMISSIONER DIAZ: No.

20 CHAIRMAN JACKSON: Commissioner McGaffigan.

21 COMMISSIONER MCGAFFIGAN: No.

22 CHAIRMAN JACKSON: My only question is are we
23 tracking into a situation with Zion that looks like the
24 history of Dresden, you know, on again, off again, on again?

25 MR. BEACH: No.

1 CHAIRMAN JACKSON: History is not repeating
2 itself?

3 MR. BEACH: No, ma'am. They have to develop --
4 it's early to tell still, but the training, while maybe not
5 as aggressive as LaSalle, is over and above, quite above the
6 regulatory requirements. There are a number of
7 material-conditions issues, but they're working those. The
8 backlogs are high. The problems are being identified. If
9 the operability assessment process improves, then degraded
10 equipment will get appropriately identified, and that's been
11 a historic problem in the past, where those things just
12 lingered.

13 And I think if you go back to Dresden, some of the
14 concerns that still involve the emergent equipment is that
15 if the problems get to the right level of management, they
16 are always appropriately addressed. It's the ones that
17 don't get into the system. And I think Zion, a root cause
18 of perhaps a number of Zion's problems is there are a lot of
19 problems that haven't been identified and gotten into the
20 corrective action process.

21 MR. COLLINS: Chairman, I would agree with
22 everything Bill said. In addition to that, I believe given
23 Zion's unique status as far as plant in a corporate sense we
24 do need to be very sensitive to the support for Zion as well
25 as the retention of qualified managers, operators, the types

1 of people that it takes not only to improve plant
2 performance but to sustain that improvement. And the senior
3 management meeting process with the removal matrix will be a
4 good measure of that.

5 To the extent the senior managers are satisfied
6 that that removal matrix is complete, I believe there is --
7 perhaps those sensitivities will be taken into consideration
8 in that process. But the dynamics for Zion are different
9 than the dynamics for other plants, and we'll have to take
10 that into consideration in any removal decision.

11 CHAIRMAN JACKSON: But also I'm concerned about
12 the what I'll call passing the watch list token around that
13 you spoke fairly positively relative to Dresden earlier --

14 MR. COLLINS: Um-hum.

15 CHAIRMAN JACKSON: And if it's just a question of
16 passing the token to the next plant, then, you know, that
17 has to do with this overall corporate performance issue.

18 MR. COLLINS: Right.

19 CHAIRMAN JACKSON: Any other comments?

20 Commissioners?

21 Good.

22 MR. COLLINS: Chairman, that concludes the
23 discussion of the plants at the senior management meeting.
24 At this time I would turn the agenda back over to Joe
25 Callan.

1 MR. CALLAN: Chairman, as I noted at the outset,
2 at this time I'm going to turn the meeting over to Carl
3 Paperiello, the director of the Office of Nuclear Materials
4 Safety and Safeguards, to discuss the assessment process for
5 fuel cycle facilities.

6 Carl.

7 CHAIRMAN JACKSON: Let me just ask you up front,
8 Dr. Paperiello, I'm interested in your describing for the
9 Commission what the threshold is for discussing fuel cycle
10 facilities and the highest-risk materials licensees?

11 MR. PAPERIELLO: Okay. Good morning, Chairman and
12 Commissioners.

13 Fuel facilities were briefly discussed at the
14 senior management meeting. Although there were no prior
15 screening meetings in this area, no concerns were raised by
16 the regional administrators with respect to any fuel
17 facility that warranted extensive discussion.

18 Last year I initiated a program to conduct
19 periodic licensee performance reviews of fuel cycle
20 facilities. This program is described in manual chapter
21 2604 issued in August of last year. Its objective was to
22 establish a simple and streamlined process by which NRC
23 management and staff would review a fuel cycle facility
24 licensee's performance in protecting public health and
25 safety and ensure consistency of the review process from one

1 facility to another and among different regions.

2 As part of the process, a teleconference between
3 the headquarters staff and a regional staff is conducted.
4 The regional administrator and I both participate in this
5 teleconference. We jointly review licensee performance. If
6 there were serious problems warranting NRC-wide attention,
7 we would bring them to the senior management meeting.

8 I would note that the NMSS process is very
9 streamlined. Issues are presented as bullets. In fact, the
10 total write-ups are about only three to four pages long,
11 although there will be attachments.

12 There has been no increase in staffing in this
13 area.

14 Results are presented to the licensee at a public
15 meeting and the inspection program is modified to reflect
16 findings. We have reviewed five of the eight major fuel
17 facilities since we began the program last year. One review
18 is in progress and the last two will be completed by
19 November.

20 The review cycle is normally two years.

21 Now in answer to the Chairman's question, I have
22 not written a threshold down. In my own mind, a threshold
23 would be problems which are long and intractable and the
24 office does not appear to be able to solve, in which case I
25 would believe and the Regional Administrator would believe

1 we would bring it to the EDO that this is a topic that needs
2 to be discussed at the Senior Management Meeting or facility
3 because we need to put more Agency-wide resources on it.

4 But this question hasn't been presented to me
5 before, so I obviously haven't written down an answer. In
6 my own mind, that would be, you know, what the threshold
7 would be.

8 For the gaseous diffusion plants, the process will
9 be different. By law we have to submit an annual report to
10 Congress. We are currently developing a procedure to
11 prepare this report.

12 In order to minimize resource expenditures, this
13 procedure is being designed not only to prepare the report
14 to meet the legal requirements but also achieve the goal, in
15 one activity, of the plant performance review and any Senior
16 Management screening.

17 Lastly, the process is being extended. In fact,
18 my staff sent me this morning a manual chapter for
19 independent spent fuel storage installation performance
20 reviews.

21 Based upon my discussions at the Senior Management
22 Meetings for the last two years, if a facility warranted
23 extensive discussion at the Senior Management Meeting, it
24 would most likely be a vendor of dry cask -- and this is not
25 writing anything down -- I certainly will consider it after

1 you raising the question -- but where I have had problems
2 that did warrant Agency-wide discussion in my program for
3 the last two years, it's actually been in dry cask storage.

4 We are going to have a formal process to review
5 the performance of all Part 72 specific licensees and
6 certificate holders and applicants, and that will
7 essentially be a screening review that can be brought to the
8 Senior Management Meeting.

9 CHAIRMAN JACKSON: Commissioner Rogers.

10 COMMISSIONER ROGERS: Well, it is really not
11 necessarily a problem with a plant, but I know the fuel
12 cycle at some of the fuel fabricators have been concerned
13 about how to use risk assessment in analyzing their plants,
14 a concern that they don't necessarily have the kind of data
15 available that one would normally include in a probabilistic
16 risk assessment, but they have other ways of assessing risk
17 and categorizing risk and I wonder if there is anything you
18 might be able to say as to where we stand with respect to
19 the acceptance of a form of risk assessment that is not
20 necessarily a PRA for a fuel cycle facility.

21 DR. PAPERIELLO: Well, you know we proposed and we
22 have discussed with the industry the use of integrated
23 safety assessment, which is a more qualitative method, and
24 obviously we have reached no final conclusion on that.

25 The fact of the matter is that if I take a look at

1 the reviews that we have already done of the five fuel
2 facilities, I don't find issues that really -- let me give
3 you an example.

4 We are only getting right now an average of one to
5 two reported events per year per facility. It is just not
6 a -- the fact of the matter is fuel facility performance in
7 my view is not all that bad. You know, there is nothing
8 really to --

9 CHAIRMAN JACKSON: And all of your Managers
10 support that?

11 DR. PAPERIELLO: I would say so.

12 MR. REYES: Let me add, since Region II has five
13 of the major fuel facilities, I happen to agree with Carl,
14 and I think the new process is a good process to take a hard
15 look without spending a lot of resources, and we do discuss
16 before the Senior Management Meeting if in fact we have
17 concerns with any facility.

18 CHAIRMAN JACKSON: Good. Commissioner Diaz.

19 COMMISSIONER DIAZ: Just a matter of "agree." Do
20 you agree that they are all not that bad, or do you agree
21 that they are good?

22 [Laughter.]

23 MR. REYES: I will only speak to the ones in
24 Region II.

25 I think they are good, and I think we have seen in

1 the last few years improvements in all of them.

2 DR. PAPERIELLO: I have deliberately planned this
3 procedure not to try to hand out SALP numbers that people
4 intend to abuse.

5 MR. CALLAN: I want to clarify something, Carl.

6 We have been getting a relatively large number of
7 event reports from the gaseous diffusion plants.

8 DR. PAPERIELLO: I understand. I want it clear.
9 When I was thinking of fuel I was thinking of the LEU and
10 HEU.

11 The gaseous diffusion plants are different, and a
12 lot of it is just the emergent issues they are finding after
13 certification, but I would reflect even on the gaseous
14 diffusion plants whereas we have had a number of problems
15 and we have had a number of violations, I think the
16 transition of our regulatory regime has been relatively
17 smooth.

18 There are not really earth-shaking problem. I
19 mean they are big plants. There's 4,000 people who are
20 employed there, but I think it has been a success.

21 CHAIRMAN JACKSON: Okay. Let me just go down the
22 line. Commissioner Rogers.

23 COMMISSIONER ROGERS: Nothing more.

24 CHAIRMAN JACKSON: Commissioner Diaz.

25 COMMISSIONER DIAZ: Is this the final --

1 CHAIRMAN JACKSON: This is your final.

2 COMMISSIONER DIAZ: Ah.

3 [Laughter.]

4 CHAIRMAN JACKSON: Your big chance.

5 COMMISSIONER DIAZ: I just have some general
6 comments.

7 I think we recognize that the Staff has tried to
8 improve the processes by which they arrive at these
9 important decisions in the Senior Management Meeting
10 characterizing the plants and placing Agency-wide resources
11 on those plants, Category II's and III's.

12 I am still a little bit concerned, especially in
13 this meeting, over the Commission understanding of the
14 transparency of the process.

15 For example, we talk about the removal matrix. It
16 is -- I am not sure I understand all I don't know about the
17 removal matrix, and that's a lot -- so it means that, you
18 know, I really think that that is a part of the process that
19 needs to be clarified because it is a very important part of
20 the process.

21 I think it might be as important as the insertion
22 matrix, which we are still working on.

23 I had a particular comment on the importance of
24 events in the decision-making. I was trying to listen to
25 the words and I noticed that essentially every time an

1 example was touched on, every issue, every event, every
2 imperfect action is addressed as reflecting directly on some
3 weakness of the organization, and that might very well be
4 true.

5 It could actually be that everything that happens
6 is a weakness somehow.

7 It also seems like we have been able now to
8 increase the detail of analysis in which a screw, a loose
9 screw in a tachometer becomes an issue and I think, you
10 know, that might be very well how good we are, but I am
11 amazed at the fact that I haven't one time referred that any
12 of these issues could -- there is a possibility -- that they
13 could be a random event, that they just happened because
14 they actually -- screws do get loose and things and people
15 are not perfect, and I think we should be aware of the
16 difference.

17 There is an important difference that the Staff at
18 the level of detail they are working needs to be aware of,
19 and that there are random events, and we need to know the
20 difference.

21 Those are the other events that have root causes
22 and we can jump on them and we could follow through, but
23 from my viewpoint, the difference is very important.

24 Thank you, Madam Chairman.

25 CHAIRMAN JACKSON: Commissioner McGaffigan.

1 COMMISSIONER MCGAFFIGAN: I have got two
2 questions.

3 One, we never did come back to Clinton and Point
4 Beach, and I was trying to figure out whether you intended
5 to say anything more about your -- what happened at the
6 meeting with regard to those two plants and we just missed
7 it, or whether it was just at the outset what you said was
8 all that you were going to say.

9 MR. COLLINS: My remarks were meant to draw the
10 distinction between the two plants, both categorized as
11 trending plants, one acknowledged to be making improvements
12 which have all the indicators of being long-term, the other
13 not.

14 COMMISSIONER MCGAFFIGAN: And in terms of what is
15 going to be released, I mean I am looking at the minutes of
16 the meeting that are in this book.

17 I don't know whether the first 30 pages deal with
18 the plants up to -- that have already been discussed, plus
19 Millstone, and then Point Beach and Clinton are the next
20 two.

21 Do those pages get released, through pages --
22 whatever it is -- 35 or some variation of this?

23 MR. COLLINS: The minutes from the Senior
24 Management Meeting have in fact been provided to the
25 Commission officers. Those minutes for the plants will be

1 screened through the process like we do any information that
2 is released to the public and they will be released for the
3 plants that were discussed here including Clinton and Point
4 Beach.

5 COMMISSIONER MCGAFFIGAN: So these minutes in some
6 form will be released?

7 MR. COLLINS: I am not sure what you are looking
8 for but the minutes from the Senior Management Meeting, yes.

9 COMMISSIONER MCGAFFIGAN: The other issue I want
10 to raise is, and I did it in January as well, is the
11 superior performance recognition, which we don't do now, I
12 have learned. We do if we do any in a couple weeks.

13 It strikes me, looking more at this book than this
14 book, this is sort of an afterthought of the Senior
15 Management Meeting process as it is currently done. It is a
16 bookkeeping thing and the threshold for superior performance
17 is a very, very high threshold.

18 We clearly have a bunch of superior performers, as
19 I said, in January and there are a very limited number that
20 get recognized, so the question maybe is a policy question
21 we have to deal with and is do we continue this process of
22 superior performers, which you spend close to zero time on,
23 entirely done by the book, or do we -- if we are going to do
24 it, do we do it right and have some real consideration of it
25 and real time spent on it, or do we just drop it, knowing

1 that it is -- that the SALP process or some other process is
2 the mechanism we use to recognize superior performers?

3 Any thoughts you have I would take, but I also
4 realize I am probably raising a policy question --

5 CHAIRMAN JACKSON: You are.

6 COMMISSIONER MCGAFFIGAN: -- that we have to deal
7 with.

8 CHAIRMAN JACKSON: Besides one wants to be careful
9 that one is not in the position of recognizing the superior
10 airline whose plane crashes the next day.

11 [Laughter.]

12 COMMISSIONER MCGAFFIGAN: But we would be equally
13 embarrassed if we gave somebody a straight SALP 1 and there
14 was a problem the next day, so my bias is to try to do it
15 well but I understand neither industry nor the Staff has a
16 great deal of interest in doing it well -- industry because
17 of the fear that you recognize 14 plants as superior
18 performers and the next time you recognize 13 -- that 14th
19 plant has financial consequences on Wall Street and the
20 upside of being recognized as a superior performer is not as
21 good as the downside of being dropped from the superior
22 performer list, so that might argue for just dropping the
23 whole concept, but I just throw this out as something we are
24 going to have to struggle with and perhaps you all could
25 advise us on.

1 CHAIRMAN JACKSON: I would like to thank the Staff
2 for an informative briefing.

3 The results and the decision-making that you have
4 indicated appear to be more focused on demonstrated safety
5 performance, and so I believe the Staff should be commended
6 for moving along that line.

7 The Commission itself has issued guidance in
8 several recent Staff requirements memoranda that's directed
9 toward improving the credibility, scrutability, and
10 consistency of the Senior Management Meeting process, and I
11 realize that the process will continue to evolve over the
12 next several months.

13 I believe you have made progress; however, I also
14 believe there continue to be areas for improvement in the
15 staff's evaluation and preparation leading to the meeting
16 and its results, and in particular added focus needs to be
17 given to the quality of the information provided in the
18 senior management meeting background papers in the watch
19 list removal matrix and as well as the information matrix,
20 the so-called pro/con charts, as well as the use of
21 performance indicators on a consistent basis, especially
22 risk informed performance indicators and other risk
23 insights.

24 Let me reiterate the point is for the NRC to be
25 timely, to be fair, objective, and as accurate as possible

1 in evaluating plant performance, and I believe that a
2 challenge has been laid before you relative to helping the
3 Commission and the public to understand the linkages between
4 the various evaluative mechanisms that we use and their
5 usefulness and how one plays into the other.

6 I'm optimistic that with the recent Commission and
7 continuing Commission direction and the current staff
8 initiatives that have begun, that that will pave a path
9 toward improvement, not only in our reactor performance
10 assessment process, but for all of the facilities for which
11 we have regulatory oversight. So the Commission will
12 continue to closely monitor the staff's performance in this
13 area and to provide guidance as appropriate.

14 Also, an additional challenge that does not merit
15 or require the same degree of resources that will need to be
16 addressed in the future is determining, particularly if
17 there are more such facilities that come under our
18 oversight, the appropriate threshold for discussing fuel
19 cycle facilities and higher risk material licensees.

20 On the one hand, given the operational history
21 that you've already outlined, you know, there's no issue,
22 and given the number of such facilities, there is no issue,
23 but down the line, one does not want to have things that an
24 individual -- ad hoc individual judgment, but rather have
25 the same fairness attached to them, consistency in

1 scrutability that we are trying to continuously improve in
2 reactor space.

3 With that, we are adjourned.

4 [Whereupon, at 11:49 p.m., the public meeting was
5 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

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Wednesday, June 25, 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: Rosalee Jackson

Reporter: CHRISTOPHER B. CUTCHALL

PERIODIC BRIEFING ON OPERATING REACTORS AND MATERIAL FACILITIES

June 25, 1997

**J. Callan
S. Collins
C. Paperiello
Regional Administrators**

CATEGORY 1

PLANTS REMOVED FROM THE WATCH LIST

These plants were previously designated as Category 2, and have taken effective action to correct identified weaknesses. No further NRC special attention beyond the current level of monitoring is needed to verify that improvement continues.

INDIAN POINT 3

CATEGORY 2

PLANTS AUTHORIZED TO OPERATE THAT THE NRC WILL MONITOR CLOSELY

Although these plants are being operated in a manner that adequately protects public health and safety, they 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 or until a further deterioration of performance results in the plant being placed in Category 3.

**Maine Yankee
Salem 1 & 2
Crystal River 3**

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

CATEGORY 3

SHUT DOWN PLANTS REQUIRING NRC AUTHORIZATION TO START UP AND THAT THE NRC WILL MONITOR CLOSELY

These plants 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. The Commission must approve restart of a plant in a Category 3 status.

Millstone 1, 2 & 3

TRENDING LETTER

None

CORRECTION OF ADVERSE TREND

None

DIAGNOSTIC EVALUATION

Clinton

PRIORITY MATERIAL FACILITIES

NONE