

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Title: PERIODIC BRIEFING ON OPERATING REACTORS AND  
FUEL FACILITIES

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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PERIODIC BRIEFING ON OPERATING REACTORS  
AND FUEL FACILITIES

- - - -

PUBLIC MEETING

Nuclear Regulatory Commission  
One White Flint North  
Rockville, Maryland

Thursday, February 15, 1990

The Commission met in open session, pursuant  
to notice, at 9:00 a.m., Kenneth M. Carr, Chairman,  
presiding.

COMMISSIONERS PRESENT:

KENNETH M. CARR, Chairman of the Commission  
THOMAS M. ROBERTS, Commissioner  
KENNETH C. ROGERS, Commissioner  
JAMES R. CURTISS, Commissioner  
FORREST J. REMICK, Commissioner

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## STAFF SEATED AT THE COMMISSION TABLE:

SAMUEL J. CHILK, Secretary

WILLIAM C. PARLER, General Counsel

JAMES TAYLOR, Executive Director for Operations

ROBERT BERNERO, Director of Operations, NMSS

WILLIAM RUSSELL, Regional Administrator, Region I

STEWART EBNETER, Regional Administrator, Region II

A. BERT DAVIS, Regional Administrator, Region III

ROBERT MARTIN, Regional Administrator, Region IV

JOHN MARTIN, Regional Administrator, Region V

JAMES SNIEZEK, Deputy Director, NRR

DENNIS CRUTCHFIELD, Associate Director for Special Projects

## P-R-O-C-E-E-D-I-N-G-S

9:00 a.m.

CHAIRMAN CARR: Good morning, ladies and gentlemen.

The purpose of today's meeting is a periodic briefing by the staff concerning the status of operating reactors, fuel facilities and other materials licensees. The Commission was last briefed on this subject in June of 1989.

The NRC senior managers meet approximately twice a year to review the performance of the various licensees and to determine which, if any, warranted increased NRC attention. Today, the staff will discuss the results of this review conducted at the January senior management meeting.

I welcome each of our regional administrators who are here today.

I understand that copies of the briefing slides are available at the entrance to the meeting room.

Do any of my fellow Commissioners have any opening comments?

If not, Mr. Taylor, please proceed.

MR. TAYLOR: Good morning. With me at the table are the five regional administration and, in

1 addition, the Director of the Office of NMSS, Bob  
2 Bernero, the Deputy Director of NRR, Jim Sniezek. In  
3 addition, Denny Crutchfield, who is the Associate  
4 Director for Special Projects, is here.

5 This was the eighth semi-annual senior  
6 management meeting in which a major portion of time  
7 was devoted to discussing nuclear safety performance  
8 at operating plants and materials licensees. This  
9 focus on safety performance at these meetings was  
10 started after the 1985 significant event at Davis-  
11 Besse involving loss of all feedwater.

12 As you will hear in this briefing, no new  
13 power reactors were added to the list of problem  
14 facilities. I attribute this to utilities starting to  
15 take corrective actions earlier when there are signs  
16 that safety performance is slipping.

17 Mr. Sniezek will now begin the briefing.

18 MR. SNIEZEK: Okay. As Jim Taylor just  
19 mentioned, Mr. Chairman and Commissioners, on January  
20 22nd and 23rd, the EDO, regional administrators and  
21 senior headquarters managers met to discuss the  
22 operational safety performance of nuclear power  
23 plants. During this most recent meeting, we discussed  
24 the performance of 17 facilities which we had  
25 determined to warrant discussion at the senior

1 management meeting.

2 In preparation for the senior management  
3 meeting, the Director of NRR meets with the Director  
4 of AEOD, each regional administrator, and the key  
5 headquarters and regional staffs to review the  
6 performance of each plant in the country. It is from  
7 these screening meetings that we selected the plants  
8 to discuss at the senior management meeting.

9 It takes about two months of intense staff  
10 effort after the screening meetings to prepare the  
11 plants' performance analysis for discussion at the  
12 senior management meeting.

13 As Jim Taylor mentioned, we are pleased to  
14 inform the Commission that for the first time a plant  
15 has not been added to our watch list.

16 (Slide) Slide two, please.

17 Based on the senior management discussions,  
18 three plants, Peach Bottom, Pilgrim and Turkey Point,  
19 were removed the list of the problem facilities and  
20 moved from Category 2 to Category 1. Plants in this  
21 category have taken effective action to correct  
22 identified problems and to implement programs for  
23 improved performance. No further NRC special  
24 attention is necessary beyond the regional office's  
25 current level of monitoring to ensure improvement

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1 continues. It should be noted that Pilgrim and Peach  
2 Bottom had been on the problem facility list since the  
3 first senior management meeting in April 1986.

4 (Slide) Slide three, please.

5 There are three plants, Calvert Cliffs, Nine  
6 Mile Point and Surry in Category 2. Plants in this  
7 category have been identified as having weaknesses  
8 that warrant increased NRC attention from both  
9 headquarters and the region. A plant will remain in  
10 this category until the licensee demonstrates a period  
11 of improved performance.

12 (Slide) Slide four?

13 One plant, Browns Ferry, remains in Category  
14 3. Plants in this category have been identified as  
15 having significant weaknesses that warrant maintaining  
16 the plant in a shutdown condition until the licensee  
17 can demonstrate to the NRC that adequate programs have  
18 both been established and implemented to ensure  
19 substantial improvement.

20 The regional administrators and Mr.  
21 Crutchfield will be discussing the rationale for the  
22 plants being in these three categories. But before  
23 they do, I believe it is important to mention that  
24 during the senior management meeting discussions,  
25 several plants were recommended as candidates for a



1 list of plants with sustained good safety performance.  
2 Four plants, Callaway, Kewaunee, Prairie Island and  
3 Yankee-Rowe achieved this recognition as consistently  
4 good performers from a safety perspective. These  
5 plants exhibited some common attributes which indicate  
6 a strong licensee commitment to the safe operation of  
7 the plant and management ownership of and  
8 responsibility for safe operation.

9 For these plants, there is active  
10 involvement of plant and corporate management in day  
11 to day activities, an active program for self-  
12 identification of problems and self-initiated  
13 improvement programs; good communications between and  
14 within plant and corporate staffs; effective  
15 maintenance programs and housekeeping programs; and  
16 effective training programs, especially in operations  
17 and maintenance.

18 For these four plants, the staff is willing  
19 to publicly acknowledge the sustained good safety  
20 performance of the plants and reduce the NRC  
21 inspection activity.

22 The staff also identified three other plants  
23 just below the top four who are worthy of honorable  
24 mention for their safety performance, Susquehanna,  
25 Saint Lucie and Diablo Canyon.

1           With the Commission's permission, I will now  
2           turn the discussion over to Mr. Bernero who will  
3           discuss the NMSS facilities, to be followed by the  
4           regional administrators and Mr. Crutchfield.

5           MR. BERNERO: Mr. Chairman, members of the  
6           Commission, for the material licensees, the senior  
7           managers have discussions of a kind similar to those  
8           for reactors. However, for the material licensees,  
9           there are only two categories of facility or licensee.

10           (Slide) May I have the priority NMSS  
11           facility slide, please?

12           The priority facilities are those which we  
13           believe warrant increased attention from both the  
14           regions and headquarters in order to ensure or improve  
15           their operational safety. There is a second category  
16           called additional facilities discussed and those are  
17           facilities which have not reached or are no longer at  
18           a level of concern to warrant priority attention.

19           The current list of priority facilities  
20           includes three facilities: Combustion Engineering,  
21           Windsor; Safety Light; and Radiation Sterilizers, all  
22           of which were on the list six months ago when we had  
23           the meeting in June '89. No new priority facilities  
24           have been added to the list.

25           (Slide) May I have the additional

1 facilities slide?

2 The list of additional facilities discussed  
3 also includes three facilities. Two of these, the 3M  
4 Company in Saint Paul and Advanced Medical Systems in  
5 Cleveland, were formerly in the priority category and  
6 one facility, U.S. Testing, has remained here in this  
7 category in the final stages of its resolution.

8 Each of these facilities, both the priority  
9 and the others, will be discussed by the cognizant  
10 regional administrator in turn.

11 I'd like to turn it over the Bill Russell  
12 from Region I now.

13 MR. RUSSELL: Thank you, Mr. Chairman. I'll  
14 discuss Nine Mile Point Units 1 and 2 first and  
15 proceed through the reactor facilities.

16 Unit 1 was identified as a facility  
17 requiring agency-wide close monitoring in June 1988.  
18 Unit 2 was added in December of 1988. Currently, Unit  
19 2 is operating and Unit 1 remains shut down and  
20 requires staff approval prior to restart. Unit 1's  
21 summary of events since the last senior management  
22 meeting is what I'd like to provide at this point.

23 The licensee reported that it had  
24 implemented its restart plan and, with the exception  
25 of completion of physical work, felt it was ready for

1 restart. A team inspection was conducted at the  
2 facility and we found significant progress in  
3 addressing the root causes of past poor performance  
4 and the corporate and management procedures and  
5 policies were in place to effectively operate the  
6 facility safely. However, additional work was needed  
7 to implement their programs in two key areas related  
8 to problem solving and teamwork.

9 Core reload and vessel reassembly has been  
10 completed and the current schedule would project  
11 restart in April of 1990. The schedule has slipped  
12 due to plant equipment delays. The major item was  
13 associated with 125 volt DC system modifications to  
14 bypass undersized breakers. A battery upgrade to a  
15 2300 amp hour battery from a 1500 amp hour battery is  
16 also planned before restart.

17 The licensee has been emphasizing the  
18 quality of work. This, combined with the new policies  
19 and procedures has resulted in underestimating  
20 schedules. Problems are now being identified by the  
21 licensee and elevated appropriately within the  
22 organization for resolution. Prior NRC concerns with  
23 respect to failure to identify and resolve issues  
24 appears to be behind us.

25 Unit 2 experienced two reactor scrams, a

1 water hammer transient and a high pressure core spray  
2 system inoperability due to operator error in the  
3 September/October period of last year. The licensee  
4 has evaluated these events and taken appropriate  
5 corrective action and, in fact, has increased the  
6 management oversight of Unit 2 operations with a  
7 deputy plant manager position.

8 NRC requalification examinations were  
9 administered last summer at Unit 2. The program was  
10 determined to be unsatisfactory based upon the number  
11 of team failures and individual failures. Corrective  
12 actions taken by the licensee have been found  
13 acceptable and additional NRC examinations have been  
14 conducted.

15 The Unit 2 refueling outage is being delayed  
16 until August to better plan the outage and to minimize  
17 overlap with the Unit 1 power ascension.

18 The potential adverse impact of future  
19 management losses and the need for succession planning  
20 and recruitment of senior corporate plant managers has  
21 been discussed with senior corporate officers of the  
22 company. The company is taking action on those  
23 issues, but is not yet ready to discuss their plans.

24 A final issue related to the recent Public  
25 Service Commission rate case settlement relates to an

1 agreement that the licensee made to conduct a broad  
2 self-assessment which includes a review of efficiency  
3 and budget issues related to the nuclear division.  
4 This review has the potential to divert management  
5 attention away from assuring effective implementation  
6 of long-term commitments to NRC and oversight of the  
7 Unit 1 restart and the Unit 2 refueling outage. The  
8 licensee has indicated that they are reconsidering  
9 their schedule regarding that commitment.

10 If there are no questions on Nine Mile, I'll  
11 go on to Calvert Cliffs.

12 COMMISSIONER ROGERS: Just on that  
13 particular point, is the state regulatory agency  
14 amenable to changing that?

15 MR. RUSSELL: It's my understanding that the  
16 schedule for that is a licensee decision. There is  
17 sufficient time to defer it.

18 COMMISSIONER ROGERS: Thank you.

19 COMMISSIONER REMICK: Bill, what are the  
20 safety implications of these actions by the Public  
21 Service Commission?

22 MR. RUSSELL: We've been watching that  
23 closely. We do not see any adverse impacts at this  
24 time and I think the positive effect of their action  
25 is to provide assurance of appropriate funding and the

1 company has been doing that. So, we do not see at  
2 this time any adverse effects.

3 COMMISSIONER REMICK: Is it something you're  
4 going to continue to watch?

5 MR. RUSSELL: We are going to continue to  
6 watch that closely.

7 COMMISSIONER REMICK: In the case of -- I  
8 think of Nine Mile back a few months ago. I read a  
9 report where there apparently was tremendous  
10 difficulty between the operations and training  
11 departments which was greatly affecting, apparently,  
12 the effectiveness of the training. Has that been  
13 resolved and how?

14 MR. RUSSELL: The issues were identified at  
15 the time of the special team inspection that was  
16 conducted in the March time frame of last year. Those  
17 attitude issues the company thought had been addressed  
18 and they were not effectively addressed. They have  
19 taken appropriate actions both from the standpoint of  
20 additional training and discipline in the case of the  
21 individuals that were involved. There does appear to  
22 be a better rapport. In fact, the issue that was more  
23 of a concern -- we saw the issues being corrected for  
24 Unit 1 and then the requalification failures that  
25 occurred in July, we felt that the lessons hadn't been

1 totally transmitted.

2 But we have been up, we have reevaluated  
3 their performance on simulator, activities and EOP  
4 examinations and we find that the attitudes are  
5 significantly improved from where they were last  
6 spring.

7 COMMISSIONER REMICK: At one time they did a  
8 lot of contract training. Do they still do a fair  
9 amount of that or is it primarily in-house now?

10 MR. RUSSELL: I can't give you a proportion  
11 as to what is contract and what is in-house, but they  
12 are moving to more in-house. I just don't know the  
13 proportion between the two.

14 COMMISSIONER REMICK: Did that result in any  
15 of the difficulties or was it internal?

16 MR. RUSSELL: We believe that it was more a  
17 case of individuals not being held accountable and the  
18 managers not holding them accountable. The policies  
19 were articulated, but they were not being completely  
20 dealt with. That has been corrected.

21 COMMISSIONER REMICK: Thank you.

22 COMMISSIONER CURTISS: Back to the state  
23 settlement of the rate case. As I recall, one of the  
24 problems or concerns of management at that operation  
25 is the salary cap in the rate case having an adverse



1 impact on their ability to attract people or to move  
2 forward with their management succession plan.

3 MR. RUSSELL: I can't answer that  
4 specifically. I have had discussions with them  
5 regarding the approach that they're taking by way of  
6 executive recruitment and what they are proposing.  
7 Those have been very general discussions. I believe  
8 that we have to wait and see with respect to the  
9 talent that they're able to identify to come into the  
10 company. They've indicated that the concern would be  
11 potentially for new individuals coming in at a  
12 different level than the rest of the organization and  
13 there are some considerations of those cost caps that  
14 occurred as a result of the Nine Mile Unit 2  
15 settlement on construction costs.

16 But I believe, based upon the discussion  
17 I've had with them, that they feel they can resolve  
18 that issue.

19 COMMISSIONER CURTISS: Okay. One other  
20 question. What is the status of the company's program  
21 on the rad waste building?

22 MR. RUSSELL: The rad waste building is  
23 somewhat behind schedule as a result of some delays in  
24 getting the robot functioning. The transporter  
25 portion of the robot was being tested in one part of

1 the country, the manipulator arm in another. They  
2 needed to put the arm and the transporter together. I  
3 do not know. It was to be delivered to the site  
4 shortly. I do not know whether it's on site and  
5 working at this point.

6 The most important part of it, I believe, is  
7 that they have established a very aggressive total  
8 exposure budget for the conduct of the work, and the  
9 work appears to be well planned with a very good ALARA  
10 budget. So, I'm less concerned about the schedule  
11 than I am the quality of the work when they do it.  
12 And that seems to be a character of the company of  
13 late which I think is a very good sign.

14 Calvert Cliffs facility. Calvert Cliffs was  
15 identified as a facility requiring close agency-wide  
16 monitoring in December of 1988. Since the last  
17 briefing of the Commission, the licensee has reported  
18 that the short-term actions that were related to the  
19 confirmation of action letter that was issued in May  
20 had been completed. They did have, at that time,  
21 significant outage work and maintenance to accomplish  
22 so that work was going on. So, they did not indicate  
23 they were ready for restart, but they felt they were  
24 ready for a readiness assessment team inspection.

25 That inspection was conducted in November of

1 1989. I'd like to focus on three broad areas of the  
2 inspection. First, in the area of maintenance and  
3 surveillance, we found programs which were  
4 significantly improved, particularly with respect to  
5 administrative controls on those activities. And we  
6 concluded that they were ready to support safe  
7 operation of the facility.

8 In the area of safety assessment and quality  
9 verification, we also found the programs significantly  
10 improved but still in transition. And a concern  
11 existed with respect to their corrective action  
12 systems which were distributed amongst several  
13 subsystems and were not well coordinated.

14 The operations area showed improvement in  
15 the area of procedures and control of the change  
16 process for procedures. Also, satisfactory control of  
17 plant status was demonstrated. However, the area of  
18 safety tagging and equipment control was not ready for  
19 inspection as it related to what I will call the back  
20 end of that process. They were doing a very good job  
21 of getting the tag-outs initially hung and in place,  
22 but there were concerns with their ability to maintain  
23 that and the clearance procedures.

24 In addition, the pressurizer leakage issues  
25 for Unit 1 were resolved.

1 One new issue was identified --

2 COMMISSIONER ROGERS: Excuse me. How did  
3 that come out?

4 MR. RUSSELL: Basically, we determined that  
5 the leakages were unique to Unit 2 based upon  
6 activities at the time Unit 2 was constructed and some  
7 process associated with some reaming had to be done  
8 that created some stress risers and we believe that  
9 that situation was unique to Unit 2 and therefore not  
10 applicable to Unit 1.

11 COMMISSIONER ROGERS: Or any other units  
12 fabricated by that same company?

13 MR. RUSSELL: We are still looking at the  
14 generic implications of the thin tube alloy 600. We  
15 believe we have a basis for concluding it's acceptable  
16 for Unit 1 to restart.

17 COMMISSIONER ROGERS: Did anyone else  
18 perform that reaming operation?

19 MR. RUSSELL: Not that I'm aware of, and I  
20 do not know the status of the generic solution to  
21 that. We have issued an information notice on it.

22 COMMISSIONER ROGERS: Well, maybe somebody  
23 could just say a word about that when appropriate.

24 MR. TAYLOR: Yes.

25 MR. RUSSELL: One additional issue was

1 identified associated with the low temperature over  
2 pressure protection system for the reactor vessel.  
3 There were violations of NRC requirements and failures  
4 to implement administrative controls to prevent over  
5 pressure transients. That is being evaluated at this  
6 time for potential enforcement actions. However, it  
7 does raise concerns for other commitments that have  
8 been made to the NRC in the past.

9 Resolution of this has been made a condition  
10 of restart by a supplement to the confirmation of  
11 action letter. The licensee has proposed a sampling  
12 scheme using a broad sampling basis for some six  
13 broad-scoped commitments to the licensee related to  
14 TMI action plan, station blackout, those types of  
15 activities, and some 20 other individual commitments.  
16 We will meet with the licensee later this month, after  
17 they've submitted their report, to review that to  
18 assure that prior commitments to the NRC have indeed  
19 been implemented.

20 Recent management and organizational changes  
21 have been implemented at the site. They've created a  
22 new position to manage their long-range planning and  
23 also to be the focus for their long-term program  
24 improvement activities. They have a new plant manager  
25 and a new quality assurance manager who has prior

1 operations experience and was previously licensed as a  
2 senior reactor operator. They have also elevated the  
3 licensing interface with the NRC and removed it from  
4 the engineering organization.

5 Overall licensee performance is improving.  
6 Start-up in March is possible and at this time the  
7 licensee hopes to start up and operate Unit 1 for a  
8 few days to a week to check out equipment before  
9 shutting down for required surveillance testing. Unit  
10 2 start-up is estimated to occur in June.

11 If there are no questions on Calvert Cliffs,  
12 I'll go --

13 COMMISSIONER REMICK: Bill, you indicate  
14 that the improved controls on maintenance has led to a  
15 significant increase in the backlog of maintenance  
16 items. I don't quite follow that. What's the reason?

17 MR. RUSSELL: Okay. The organization is  
18 operating under new administrative controls and  
19 policies associated with interface. They are still  
20 learning those and while they learn them they do not  
21 have the same efficiency. So, if they were to base a  
22 schedule on historical data as far as time to perform  
23 it, manloading the schedule, they would come up with a  
24 schedule which is much shorter than what their recent  
25 experience has been showing. It's just taking them

1 longer as a result of the tighter administrative  
2 controls to get the same amount of work accomplished.  
3 And that's going to take some experience working with  
4 the system to get that efficiency back up.

5 COMMISSIONER REMICK: Are these controls  
6 that they developed --

7 MR. RUSSELL: Yes, sir.

8 COMMISSIONER REMICK: -- or are they  
9 controls that we proposed or --

10 MR. RUSSELL: No, these are -- the approach  
11 that we've taken is we identified the concerns with  
12 respect to work control with the events that occurred  
13 back in March and April time frame where they were  
14 removing systems from service inappropriately that  
15 resulted in violations of NRC requirements and  
16 escalated enforcement. The company has proposed the  
17 changes. After they have completed that, we go in and  
18 review them, which we did in November. But these are  
19 procedures which they have developed in response to  
20 the problems which occurred earlier in the year.

21 COMMISSIONER REMICK: What is the status  
22 today? Do you know the backlog? Is it improving or  
23 getting worse?

24 MR. RUSSELL: The most recent discussion  
25 I've had with them is that they are still not

1 achieving the efficiencies that they would like to.  
2 They're not satisfied with the productivity of the  
3 work. They are satisfied and we are satisfied with  
4 the controls that they have on it to assure that work  
5 is done when the conditions are appropriate for doing  
6 that work.

7 The backlog is somewhat of a misnomer. They  
8 have a certain amount of work that they need to  
9 accomplish prior to restart of the first facility.  
10 That is causing schedule delays and that will move out  
11 in time, but there is not a backlog in the context of  
12 work that is being deferred other than the  
13 surveillance testing that I mentioned that they would  
14 like to start up, heat up, identify what additional  
15 work needs to be done before they shut down for the  
16 surveillance testing, which seems prudent.

17 COMMISSIONER REMICK: How about the quality  
18 work? Is there any indication of necessity for  
19 additional rework or is it quality --

20 MR. RUSSELL: That has not been an issue  
21 with Calvert Cliffs. We've previously characterized  
22 the quality of the work and the capability of the  
23 individuals doing that work at the first line level.  
24 They are quite good craftsmen. We do not have  
25 concerns with the capabilities of the staff. It was



1 more the management policies and controls of making  
2 sure that the timing was appropriate to accomplish  
3 that work and that the prerequisites have been met to  
4 do that.

5 COMMISSIONER REMICK: Thank you.

6 MR. RUSSELL: The next facility that I'll  
7 discuss is the Pilgrim facility. Pilgrim was  
8 identified in April of 1986 as a facility requiring  
9 close agency-wide monitoring. We issued a  
10 confirmation of action letter at that time initially  
11 addressing technical issues which was revised to  
12 address management issues. The licensee reorganized  
13 with new management under Ralph Byrd in early 1987 and  
14 there have been extensive hardware improvements,  
15 corrective maintenance and material improvements to  
16 the facility. They also implemented major  
17 modifications to address decay heat removal capability  
18 and Mark I containment reliability.

19 Emergency preparedness planning deficiencies  
20 were identified by FEMA in their off-site emergency  
21 plans. Substantial progress in addressing planning  
22 deficiencies was evident prior to start-up in December  
23 of 1988. Power ascension has been closely monitored  
24 by the staff with NRC hold points at five percent, 25  
25 percent, 50 percent, 75 percent and 100 percent power.

1 Reports have been made to the Commission at each hold  
2 point to address both performance during the power  
3 ascension program and progress in resolving off-site  
4 emergency preparedness issues.

5 Since the last senior management meeting,  
6 the licensee has completed the power ascension program  
7 and confirmation of action letter 86-10 has been  
8 closed. Early in the power ascension program, the  
9 licensee experienced problems with procedure  
10 adherence, personnel errors and equipment performance.  
11 In each case, the licensee performed in-depth analysis  
12 of the events and extracted important lessons learned  
13 Subsequent performance, particularly that since the  
14 fall of 1989, has been good. The management control  
15 of the October maintenance outage and the shutdown  
16 from outside the control room were particularly  
17 noteworthy. A full-scale emergency  
18 drill was conducted in October of 1989 which satisfied  
19 the terms of the scheduler exemption issued in  
20 December of 1988. The drill demonstrated significant  
21 progress in resolving the previous planning  
22 deficiencies and there were no deficiencies related to  
23 response of local governments, nor were there any  
24 deficiencies related to on-site licensee performance.  
25 FEMA did identify two deficiencies in the Commonwealth

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1 of Massachusetts' response related to content of  
2 emergency broadcast system messages and state command  
3 and control functions. FEMA has issued a summary  
4 report which identifies these deficiencies.

5 FEMA's final exercise report is expected the  
6 end of this month. Additional training and remedial  
7 exercise is needed to resolve these exercise  
8 deficiencies. The Boston Edison Company has advised  
9 the NRC and the Commonwealth of Massachusetts that it  
10 will assist in correcting the exercise deficiencies.

11 The Boston Edison Company's self-assessment  
12 capability is significantly improved. Throughout the  
13 power ascension program, Boston Edison Company has  
14 demonstrated its ability to critically assess its own  
15 performance. Licensee evaluations at each hold point  
16 have been consistent with NRC independent evaluations.  
17 The final assessment report is well supported with  
18 backup material demonstrating the depth and nature of  
19 the licensee's self-assessment.

20 Several areas were identified for further  
21 licensee improvement. Three of these, procedure  
22 upgrade, procedure adherence and management self-  
23 assessment, will continue to be closely monitored by  
24 the regional staff.

25 In summary, the licensee has improved its

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1 performance such that special agency-wide attention is  
2 no longer required. The region will continue to  
3 maintain three resident inspectors at that facility.

4 COMMISSIONER REMICK: Bill -- excuse me. Is  
5 there another question? Bill, Pilgrim, in years past,  
6 seemed to be particularly prone to loss of off-site  
7 power due to lightening strikes. What's the current  
8 history on that?

9 MR. RUSSELL: The loss of off-site power  
10 events, you're correct, they were higher than other  
11 facilities. They have installed a third diesel  
12 generator in the switch yard with the capability to  
13 feed independent of the switch yard into the emergency  
14 buses. That was a part of their enhancement program  
15 was the reliability of power. It is not a safety  
16 grade system, but it is one which exists and it  
17 addresses both the lightening strike issue and the  
18 icing problems which have been experienced in the  
19 switch yard.

20 COMMISSIONER REMICK: Another question. It  
21 appears to me, and I might be wrong, that when a plant  
22 gets in trouble, it seems like that's when the utility  
23 commission or Public Service Commission step in and  
24 place some of the things you've just discussed. Is  
25 that a trend, that when a plant is down that that's

1 the time for the public utility commission to step in  
2 and place a little leverage?

3 MR. RUSSELL: I only have observations from  
4 the facilities in Region I, but they're clearly--  
5 when there are actions that are taken which appear to  
6 the regulators to either be imprudent or to be related  
7 to management failures, that there appears -- whether  
8 it's the Public Service Commission itself or whether  
9 it's People's Counsel or interveners, there does  
10 appear to be litigation associated with those issues  
11 through ratemaking bodies.

12 COMMISSIONER REMICK: And we have no  
13 concerns -- the staff has no concerns about safety  
14 questions related to this?

15 MR. TAYLOR: Yes, we do. That's why we've  
16 observed what's happened, for example, in the rate  
17 set-up at Nine Mile. We received the settlement from  
18 Massachusetts and provided that to the Commission.  
19 The assessment discussions with the company have  
20 assured us that in spite of these activities we do not  
21 see any deteriorating safety performance that we can  
22 tie to these activities. That's your concern?

23 COMMISSIONER REMICK: Yes.

24 MR. TAYLOR: As a matter of fact, I believe  
25 there's a report coming to the Commission --

1 COMMISSIONER ROBERTS: We have it.

2 MR. TAYLOR: It just came up, which is an  
3 attempt to get a broader look at that. But that is  
4 obviously a concern in our mind, that the PUC  
5 activities not in any way cause safety performance to  
6 deteriorate. So, it's a matter in all cases where  
7 that occurs or some action by the -- it takes close  
8 watching by the staff to be sure it doesn't have an  
9 adverse impact on safety.

10 COMMISSIONER REMICK: I don't question the  
11 staff's conclusion. I was surprised by it, but I sure  
12 hope that you'll continue to monitor it.

13 MR. RUSSELL: We are.

14 MR. TAYLOR: We're extremely conscious of  
15 that.

16 MR. RUSSELL: I've had discussions with the  
17 senior executives of the utilities that are in that  
18 situation personally and I'm quite concerned when  
19 additional funds are needed to implement corrective  
20 actions that appears potentially to be going the  
21 opposite way with the ratemaking proceedings that  
22 funds are being taken away. To date, the experience  
23 has been that it adversely impacts other portions of  
24 the company, that is the non-nuclear portions, which  
25 has a concern on reliability of the other activities

1 that the company carries out.

2 COMMISSIONER CURTISS: While we're on this  
3 topic, that's a concern that I guess I've had in the  
4 past as well, particularly as these agreements crop up  
5 more frequently. It's a question of the chicken or  
6 the egg, which came first. Did you become a problem  
7 plant because of the state incentive regulation or did  
8 the state incentive regulation follow based upon a  
9 concern about the fact that the plant was having more  
10 difficulty is one that -- the answer to which is not  
11 clear to me.

12 I did look through quickly the report that  
13 came up last night and I didn't see any particular  
14 pattern between those states that had these  
15 arrangements and problem plants. Is that what you're  
16 finding?

17 MR. TAYLOR: I don't believe there is a  
18 pattern, per se, but it has occurred. I'd suggest  
19 that after the Commission studies that, we may want to  
20 have a separate briefing on this subject.

21 COMMISSIONER CURTISS: That's what I was  
22 going to suggest. It seems to me that there's enough  
23 there. It may not be tied to problem plants, but it's  
24 significant enough that a separate briefing might be  
25 appropriate.

1 MR. TAYLOR: Yes, sir.

2 COMMISSIONER CURTISS: That's all.

3 MR. RUSSELL: I'll go on to the Peach Bottom  
4 facility. Peach Bottom has been receiving --

5 COMMISSIONER CURTISS: Bill, I had one other  
6 question on Pilgrim. I'm sorry.

7 MR. RUSSELL: Sure.

8 COMMISSIONER CURTISS: On the deficiencies  
9 that FEMA identified in emergency planning, I gather  
10 those were both state deficiencies?

11 MR. RUSSELL: Yes, sir. With the exercise  
12 you're talking about?

13 COMMISSIONER CURTISS: Right.

14 MR. RUSSELL: Yes.

15 COMMISSIONER CURTISS: Two questions. One,  
16 I take it from that that the state of emergency  
17 preparedness at the local level is in pretty good  
18 shape up there. Two, what's being done to address the  
19 state deficiencies? Could you say a word or two on  
20 what that --

21 MR. RUSSELL: The state deficiencies broadly  
22 were associated with content of emergency broadcast  
23 system messages where they were lacking certain  
24 information, the timeliness of getting those out, and  
25 the command and control function of information



1 passing from the Massachusetts Civil Defense Agency  
2 Headquarters to the Area II office and then out to the  
3 locals and accomplishing that within the time frames  
4 specified in FEMA's evaluation criteria. In most  
5 cases, that needs to be accomplished within 15 minutes  
6 and there were several cases where it took longer than  
7 15 minutes.

8 The Commonwealth is reviewing the summary  
9 report. Boston Edison Company has indicated a  
10 willingness to assist with training or in any other  
11 way that they can. The local community performance  
12 was quite good. There were no deficiencies. That's  
13 not to say that there are not going to be areas  
14 identified for improvement, but I physically visited a  
15 number of the community EOCs during the exercise in  
16 accompaniment with the FEMA Region I administrator and  
17 we had staff that participated as both observers and  
18 also as monitors at various locations.

19 Overall, the community performance was quite  
20 good, if you subtract from that the confusion that was  
21 caused by some misinformation that was flowing from  
22 the state level.

23 COMMISSIONER CURTISS: Okay.

24 CHAIRMAN CARR: Let's proceed.

25 MR. RUSSELL: Peach Bottom facility. Peach

1 Bottom was identified as a facility requiring close  
2 agency-wide attention in April of 1986. The plant was  
3 shutdown by NRC order in March of 1987. The order  
4 required a corrective action plan to address the root  
5 causes of the past poor performance and the conditions  
6 which led to widespread inattention of licensed  
7 operators. The restart plan submitted pursuant to the  
8 order was found acceptable and the NRC confirmed  
9 satisfactory implementation of that plan through an  
10 integrated assessment team inspection.

11 The Commission approved a phased restart of  
12 Unit 2 on April 17th, 1989. The Unit 2 went critical  
13 on April 27th and operations during the power  
14 ascension program were carefully controlled and well  
15 planned. Two reactor scrams did occur in May and  
16 July, both related to equipment problems, one with a  
17 feedwater heater control switch -- excuse me,  
18 feedwater three element control switch for the  
19 feedwater regulating valve, and the EHC system  
20 pressure regulator problems with the turbine controls.

21 Operator performance and shift manager  
22 performance throughout the power ascension has been  
23 noteworthy. Procedure adherence by licensed operators  
24 has been excellent. There have been no significant  
25 operator errors or reportable events. Based upon

1       excellent Unit 2 performance, the shutdown order was  
2       lifted on October 5th, 1989.

3               Unit 3 was restarted on November 19th, 1989.  
4       At the time of the shutdown order, the plant was in a  
5       refueling and pipe replacement outage.       Pipe  
6       replacement and refueling activities were well  
7       conducted. The start-up and power ascension of Unit 3  
8       was well controlled and executed.       The licensees  
9       effective oversight of operations and its ability to  
10      self-assess its performance, identify areas for  
11      further improvement, and implement corrective action  
12      has been repeatedly demonstrated and is now a  
13      noteworthy strength.       Overall performance has  
14      significantly improved and is characterized by a  
15      positive safety culture at the facility.

16              We've concluded that normal monitoring by  
17      the region is appropriate for the Peach Bottom  
18      facility.

19              If there are no questions --

20              COMMISSIONER REMICK: You indicate that the  
21      plant manager program was viewed as a positive  
22      addition and I thought that was quite interesting when  
23      they did that, especially where at Limerick they do  
24      not have the same arrangement, and I'm not suggesting  
25      they should because I feel you organize around the

1 people you have. That has worked out satisfactory?

2 MR. RUSSELL: It's worked out very well.  
3 I've personally observed shift turnovers and  
4 briefings. I've observed them on the simulator and  
5 the shift managers are definitely in charge of the  
6 shift and they are performing a very valuable role and  
7 that role goes beyond just what you would expect of a  
8 shift supervisor actually into managing activities at  
9 the facility and it's very effective. They have some  
10 very capable individuals in those positions.

11 COMMISSIONER REMICK: Just a general  
12 question that really applies across the region. I  
13 know Commonwealth has the SCREE which is somewhat  
14 similar, I think. Throughout the regions, are there  
15 other cases of shift managers, engineered shift  
16 managers?

17 MR. RUSSELL: They have different titles.  
18 We have shift supervisors who have engineering  
19 degrees. Some facilities have quite a number of  
20 people in the operations department that have degrees.  
21 Maine Yankee comes to mind which basically hires  
22 people in the operations organization that have  
23 degrees and the first --

24 COMMISSIONER REMICK: But I'm thinking of  
25 this organizational structure basically.

1 MR. RUSSELL: But the structure of the shift  
2 manager, I think in fact it's similar to what shift  
3 superintendents do at other facilities, possibly not  
4 as much as it relates to interfacing with other  
5 organizations and being able to manage activities.

6 COMMISSIONER REMICK: Thank you.

7 MR. DAVIS: There are two plants in Region  
8 III that I'm aware of that have shift managers. One  
9 is Davis-Besse and I think the other is Monticello.

10 COMMISSIONER REMICK: Davis-Besse. Thank  
11 you.

12 MR. RUSSELL: I'll go on to the material  
13 facilities in Region I. The Safety Light facilities  
14 and USR Industries have requested a hearing on the  
15 staff's two orders issued to Safety Light and USR.  
16 The first order required characterization of the  
17 contamination on-site, submission of a decontamination  
18 plan and implementation of that plan. The second  
19 order required funds to be placed in escrow to cover  
20 site characterization.

21 Because of this litigation, my remarks will  
22 be brief and not address matters which could be ex  
23 parte. The licensing board which initially stayed the  
24 immediate effectiveness of the staff's two orders has  
25 issued two recent decisions. First, the licensing

1 board concluded that the NRC has jurisdiction with  
2 respect to the staff's order to USR Industries. The  
3 second licensing board decision lifted the immediate  
4 effectiveness of the stay. Both of these licensing  
5 board decisions are on appeal.

6 The Safety Light facility continues to  
7 receive close NRC oversight and the staff has  
8 confirmed that those immediate actions with respect to  
9 securing the facility, posting areas of contamination,  
10 and preventing public access to areas of contamination  
11 have been implemented. To date, no funds have been  
12 placed in escrow for the site characterization. A  
13 site characterization plan has been received and  
14 approved subject to incorporation of staff comments.  
15 That's the status on the Safety Light.

16 The last facility that I have to discuss is  
17 Combustion Engineering. Combustion Engineering was  
18 identified as a facility which had weaknesses in the  
19 areas of radiation protection, operation and  
20 management controls. A confirmation of action letter  
21 was issued in 1988 requesting an integrated plan to  
22 address past performance weaknesses. There have been  
23 a number of civil penalties and violations at the  
24 facility. In the last six months, or since the last  
25 senior management meeting, the staff has conducted

1 five inspections at the facility, including one  
2 special team inspection. Overall performance has  
3 significantly improved. There were four minor  
4 violations during that period of time but no escalated  
5 enforcement.

6 In December of 1989, pellet productions  
7 ceased at the Windsor facility. The hematite facility  
8 in Region III, which is undergoing expansion, is now  
9 the producer of fuel pellets for Combustion  
10 Engineering. The Windsor facility is being maintained  
11 in standby for a transition period to ensure a  
12 reliable supply of pellets and the start-up of the  
13 hematite facility. The Windsor facility is being  
14 decontaminated and the pellet shop will be eventually  
15 converted to additional space for fuel rod and bundle  
16 assembly. With termination of pellet production, the  
17 radiological control issues, criticality safety issues  
18 and material accountability concerns are significantly  
19 reduced.

20 The licensee has reported that all actions  
21 associated with their improvement program have been  
22 completed. Senior management, independent of facility  
23 operations is conducting an independent review of  
24 their final assessment report and a meeting is planned  
25 to review their results compared to NRC's inspection

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1 evaluation results. NRC will conduct an additional  
2 team inspection as a part of its closeout this spring.  
3 A SALP report covering the two year period is planned  
4 later, early part of this summer with a meeting with  
5 the licensee.

6 That's the status on Combustion Engineering.

7 COMMISSIONER REMICK: I've always had some  
8 interest and some concern, I guess, what our  
9 requirements are, if any, or what our expectations are  
10 in material licensees on such things as criticality  
11 and health physics. I'll remind Mr. Bernero that NMSS  
12 is going to come sometime and brief me on those  
13 expectations under Part 72, but facilities like this,  
14 the question is since we don't license those people, I  
15 don't believe, what do we expect of them from training  
16 and retraining?

17 MR. RUSSELL: It might help for me to  
18 characterize some of the issues that resulted in our  
19 identifying this as a facility requiring close  
20 monitoring.

21 CHAIRMAN CARR: They are licensees.

22 MR. PARLER: If they have the material, they  
23 have to be licensed. Perhaps you're talking about the  
24 individuals.

25 MR. RUSSELL: I'm talking about the



1 individuals, yes.

2 MR. PARLER: Yes.

3 COMMISSIONER REMICK: We sometimes speak of  
4 certification and I'm not sure what that means.

5 MR. RUSSELL: The -- for instance, in the  
6 area of criticality safety, the kinds of problems that  
7 were observed in the past which are not continuing  
8 problems today, related to pellet production  
9 activities. There were areas in some of the ovens and  
10 areas around the presses where material could  
11 accumulate that had the potential for resulting in  
12 coefficients for criticality reactivity of, say, .95,  
13 which is what the analysis was based on.

14 For example, trays with pellets could only  
15 be stacked to the point where the pellets were in the  
16 trays up to five inches high to ensure a subcritical  
17 geometry. We found problems with some of the spacers  
18 and some of the physical measures which would prevent  
19 you from exceeding a K effective of .95.

20 In the area of health physics, we found  
21 problems with ventilation systems with potential for  
22 airborne activity around the presses. Those were  
23 substantially improved by putting in stainless steel  
24 containments, modifying the ventilation system. These  
25 were, in each case, commitments that had been made in

1 their licensing documents and which we found were not  
2 being effectively maintained. So, this was a review  
3 against existing requirements in those areas.

4 There were numerous violations at the  
5 facility, including civil penalties for some of those  
6 deficiencies. And it was that experience which caused  
7 us to give this facility the status of close agency-  
8 wide monitoring.

9 CHAIRMAN CARR: All right. Let's proceed.

10 MR. RUSSELL: I'm done with Region I.

11 CHAIRMAN CARR: The closer you are to  
12 headquarters, the more plants you've got, right?

13 MR. RUSSELL: Yes, sir.

14 MR. EBNETER: Good morning, Mr. Chairman,  
15 Commissioners. I have two plants to discuss, Turkey  
16 Point, which has moved up on our watch list from  
17 Category 2 to Category 1, and Surry Station, which  
18 remains in Category 2.

19 Turkey Point. At last briefing on problems  
20 plants, we noted Turkey Point had made some good  
21 progress in several areas, but that recent events have  
22 caused us concern. One of these concerns was the  
23 senior management at the FP&L and at the stations.  
24 Since that briefing, our concerns have been reduced as  
25 a result of changes in senior management and these

1 include a new chairman of the board and CEO who's  
2 actively interested in and participates in nuclear  
3 program; the recruitment of an executive vice  
4 president for nuclear operations with proven  
5 performance and experience in nuclear operations; the  
6 assignment of an experienced manager from a high  
7 performance plant as site vice president to Turkey  
8 Point.

9 The result that we see is good performance,  
10 a strong vertical senior management chain both at the  
11 corporate level and at the site levels.

12 This management team has contributed to an  
13 improved safety attitude and performance in all areas.  
14 The operations are conducted in a conservative manner  
15 and safety is a primary consideration in decision  
16 making.

17 Previously identified weak functional areas  
18 have improved. The SALP for the period ending in July  
19 31st improved in all areas. All areas except one were  
20 rated Category 2. Security was rated at Category 3  
21 and that was noted on an improving trend. This has  
22 been a continuous problem at Turkey Point, but it is  
23 being worked on and there will be significant changes.  
24 I think Commissioner Curtiss was there and noted the  
25 construction work going on for the new security

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1 facility.

2 Our team inspections, and we have conducted  
3 many of them in the last six months, have all been  
4 very positive with no major findings. This included  
5 our Appendix R inspection, emergency operating  
6 procedures and reg. guide 197.

7 The previous weakness was self-assessment  
8 and problem resolution. Many changes have been made  
9 which lead to improved performance in this area. Some  
10 examples that I've noted are the system engineer  
11 program, event response teams and critiques, enhanced  
12 QA audits, active management involvement and the  
13 initiation of an employee concern program for feedback  
14 from the FP&L staff.

15 Training was also an area of concern over  
16 the past. Remedial actions have significantly  
17 improved in this area. One long-term item should be  
18 completed in the spring of 1990 and this is the  
19 programmatic revision to the requal program.

20 There have been positive longer-term trends  
21 over the past year and a half. These have resulted  
22 from the completion of almost all activities in their  
23 performance enhancement program which has been a  
24 several year program and the findings of an  
25 independent management assessment. The staff has

1 inspected these, reviewed them, found them acceptable  
2 and there are a few that are still long-term items.

3 Material condition and reliability of the  
4 plant has improved significantly. The plant has  
5 undergone a general clean-up, has recovered  
6 contaminated areas and the plant generally is quite  
7 tight at this point, very few steam, water leaks in  
8 the facility. They have undergone refurbishment of  
9 the black start diesel generators which are reserve  
10 units for the emergency generators. They have  
11 accomplished replacement of aging equipment, pipe  
12 erosions and component cooling water heat exchangers.  
13 They're in a procedures upgrade program which we think  
14 is effective and they have initiated some supplemental  
15 surveillances on the backup equipment at the plant.

16 So, even though significant progress has  
17 been made and we have elevated them on the watch list,  
18 our concerns are reduced. Some areas still need  
19 continuous attention and the region will continue to  
20 monitor the plant at our current level of inspection  
21 activity, which is three resident inspectors and  
22 almost monthly team inspections at the facility.

23 Any questions on Turkey Point?

24 COMMISSIONER ROGERS: Yes. Just one of the  
25 curious things about that company has been the

1 difference between the two nuclear sites and the great  
2 attention that they paid to a total quality  
3 improvement program. In fact, they've won the Deming  
4 Award, I understand.

5 MR. EBNETER: Yes, that's true.

6 COMMISSIONER ROGERS: Now, what is your view  
7 of the impact, either positive or negative, of that  
8 total quality improvement program -- I've forgotten  
9 what it is, TQA or something -- on these latest  
10 changes, whether there's any relevance to it, any  
11 connection. They've had that program in place for a  
12 long time and whether it was helpful or not helpful in  
13 their making progress. Obviously, they've made some  
14 important changes in management and that's a separate  
15 function, I guess. But --

16 MR. EBNETER: Well, there's some mixed  
17 reactions on that. Let me start first -- I think if  
18 you read the Saint Lucie SALP, there's continuous  
19 reference throughout that SALP to the quality  
20 improvement program and the role it has played in good  
21 performance at that facility.

22 I don't think you saw that same reaction at  
23 the Turkey Point plant. It was probably resisted more  
24 at the plant. There was a different attitude between  
25 these two stations.

1 I do note though when we reviewed the system  
2 engineer program, the system engineers were really  
3 using the statistical quality approach in tracking and  
4 monitoring the reliability of the diesel generators in  
5 particular and I was very impressed with that one  
6 snapshot that I looked at.

7 So, I don't really know. My own view is  
8 that people make things happen and these are just  
9 tools that present management is really going to --

10 COMMISSIONER ROGERS: Okay.

11 COMMISSIONER CURTISS: Just one quick  
12 observation on Turkey Point. I did have the  
13 opportunity to go down to that plant a couple weeks  
14 ago and prior to going down and in view of some of the  
15 comments that had been expressed, I guess there was a  
16 concern that we were leaning forward in the trenches  
17 with the latest SALP. In fact, there were some  
18 critical comments filed on the SALP that suggested  
19 that we were getting out front of what was actually  
20 happening there.

21 I must say, my impression when I went down  
22 to the plant is that your assessment is right on the  
23 mark, that the progress there is significant. I do  
24 think they have a ways to go. But in view of the  
25 comments that were raised at the last Commission

1 meeting, the concern, I guess, had been expressed that  
2 maybe we're moving too quickly with that plant. I'm  
3 pleased to see what's happening down there and I do  
4 think they've come quite a ways. I do think they've  
5 got a ways to go but I think the assessment that  
6 you've given in the materials is right on the mark.

7 MR. EBNETER: Thank you. I have just one  
8 comment. They do have a major outage coming up which  
9 will have significant impact on the station also,  
10 particularly in the security area is probably the  
11 major one. The purchasing diesel generators also may  
12 have a risk because of their present configuration,  
13 but that will be reduced considerably with the  
14 modifications to the plant.

15 Anything else?

16 COMMISSIONER REMICK: I noticed in some of  
17 the Region I plants and also in Region II,  
18 specifically Turkey Point, we talk about cultural  
19 change. I have to admit to a bias against that  
20 coinage of words because --

21 MR. EBNETER: I did not use that word, sir.

22 COMMISSIONER REMICK: It's in the text. It  
23 worries me because of the adverse impact it has on  
24 people's pride who are many times trying to do a  
25 sincere job within the limits that they have. Do we



1 in this Agency have something to constitute a  
2 definition of culture, proper culture?

3 MR. TAYLOR: In fact, your concern was  
4 echoed at our prebrief last night.

5 COMMISSIONER REMICK: I see. I see.

6 MR. TAYLOR: We wrote those words. I said I  
7 don't like that word. I like safety attitude.

8 COMMISSIONER REMICK: Or approach to  
9 operations.

10 MR. TAYLOR: Approach to operations and the  
11 attitude to protecting safety. So, I think we slip in  
12 our terminology.

13 CHAIRMAN CARR: Whatever you call it, we  
14 like what we see.

15 MR. TAYLOR: Well, yes, but there is a thing  
16 called approach to safety or safety -- I think that  
17 you can define that by good -- culture is too broad a  
18 psychological --

19 MR. EBNETER: And it can be very  
20 personally --

21 MR. TAYLOR: I don't like it.

22 CHAIRMAN CARR: All right. Let's proceed.

23 MR. EBNETER: The second unit I want to  
24 discuss is the Surry unit. The Surry Station was  
25 placed on the watch list in Category 2 at the senior

1 management in May of 1989 and was discussed at the  
2 Commission briefing in June of 1989. Some issues were  
3 management effective, aging equipment and design basis  
4 concerns.

5 Improvements are being made and they are  
6 being made very rapidly. We now see a management that  
7 is aggressive in identifying the pursuing problems.  
8 Corporate organizational changes, including a  
9 department dedicated to nuclear operations, and  
10 experienced senior vice president assigned to the  
11 nuclear department; the recruitment of a vice  
12 president for nuclear services for experience in  
13 nuclear power industry; and the reassignment of a  
14 nuclear manager to the vice president of nuclear  
15 operations have had positive impacts on station  
16 operations.

17 Additional changes at the station include a  
18 new station manager and a new quality assurance  
19 manager which has strengthened the overall team.

20 The Virginia Power Corporation and the  
21 management has integrated the NRC findings, they have  
22 integrated NRC concerns. The results of an  
23 independent study by the Mack Corporation --

24 MR. THOMPSON: If you'll talk a little bit  
25 closer toward the microphone, if you'll shift.

1 MR. EBNETER: Should I start over on this  
2 station right from the beginning?

3 CHAIRMAN CARR: Sure.

4 MR. EBNETER: The Surry Station was placed  
5 on the watch list in Category 2 at the senior  
6 management meeting in May 1989 and was discussed at  
7 the Commission briefing in June of 1989. Issues were  
8 management effectiveness, aging equipment and design  
9 basis concerns.

10 Improvements are being made at a very rapid  
11 rate and we now see a management that is aggressive in  
12 identifying and pursuing problems. The corporate  
13 organization changes, including a department dedicated  
14 to nuclear operations, the assignment of a senior vice  
15 president assigned to the nuclear organization, the  
16 recruiting of a vice president for nuclear services  
17 and this individual has had experience in the nuclear  
18 industry. They have reassigned another vice president  
19 with experience in nuclear operations to the nuclear  
20 operations department.

21 Additional changes that have been made is a  
22 new station manager and new quality assurance manager  
23 at the station, which has had a positive impact also.

24 The Virginia Power Corporation management  
25 has integrated NRC findings, the results of an

1 independent study by the Mack Corporation and the  
2 results of an independent study of organization  
3 staffing into an overall plan to come up with a  
4 consolidated plan of improvements. This includes the  
5 strengthening of the station staff and some of these  
6 have already been done by the addition of a mechanical  
7 and electrical maintenance crews, the assignment of  
8 additional maintenance engineers and they have  
9 recruited additional station operators, licensed  
10 operators.

11 Surry equipment improvement upgrades have  
12 been directed at motor operated valve rework and test,  
13 heat exchange replacements and service water system  
14 modifications. The entire station has undergone a  
15 material condition upgrade and a design basis  
16 documentation review, which is very extensive, is  
17 further identifying areas for improvement. A  
18 procedures upgrade program has been initiated to  
19 revise approximately 7,000 procedures. This is a  
20 long-term project and to date they have done about 350  
21 procedures.

22 Emergency preparedness was identified as an  
23 NRC concern. The licensee has added additional staff  
24 to the corporate office and added staff at the sites.  
25 They have retrained staff. They did an extensive

1 exercise, full scale, in December. That was a fully  
2 successful exercise and it was monitored by my staff.

3 In preparation for the restart of Unit 1 in  
4 July and Unit 2 in September, the licensee conducted a  
5 self-assessment program of operational readiness. We  
6 felt this was a very good effort and helped them with  
7 the successful restarts of the units. The unit  
8 restarts did experience some difficulty. There were a  
9 few personnel errors and some equipment malfunctions,  
10 but since then the stations, both of them, have  
11 performed reasonably well. Unit 1 has set an  
12 operating record for the Surry Station.

13 The operations today we feel are being  
14 conducted in a conservative manner and with a good  
15 safety attitude.

16 The Surry SALP for the period ending June  
17 1989 reflects previous poor performance. Of the seven  
18 functional areas, five were Category 3s and there was  
19 one Category 1 in security and a Category 2 in  
20 technical support. Most of these, however, were noted  
21 as showing improvement at the latter part of that  
22 period and we continued to see that improvement.

23 We continue to see improvements, but Surry  
24 needs to fully implement their programs and  
25 demonstrate over time that the changes are lasting

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1 ones. The present status of Surry warrants the  
2 continuation of increased NRC inspection. We have  
3 three resident inspectors on site and the additional  
4 headquarters and the regional attention to their weak  
5 areas.

6 That's all I have on Surry, if you have some  
7 questions.

8 CHAIRMAN CARR: All right. Let's proceed.

9 MR. EBNETER: That's all I have.

10 Bert?

11 MR. DAVIS: Mr. Chairman, Commissioners, I  
12 have no reactors to discuss today. I do have three  
13 materials facilities, the WESF capsules primarily  
14 oriented toward the Radiation Sterilizers Company, the  
15 Advanced Medical Systems facility, and 3M.

16 First, the WESF capsules. Concerns  
17 regarding these WESF capsules arose when a capsule  
18 leaked at the Radiation Sterilizers' facility in  
19 Decatur, Georgia. At the May 1989 senior management  
20 meeting, we concluded that RSI should stay on the list  
21 of facilities requiring increased NRC attention until  
22 the capsules at Decatur and Westerville, Ohio had been  
23 transferred to DOE in Richland, Washington. Shipments  
24 were delayed in 1989 due to defective casks. The  
25 defects have now been corrected and shipping casks are

1 available.

2 DOE currently estimates that capsules will  
3 be removed from Decatur by August of this year and  
4 from Westerville by October of this year. There are  
5 some 180 capsules involved.

6 The destructive testing of the failed  
7 capsule, the one that failed at Decatur, has been  
8 delayed as a result of DOE concerns with the facility  
9 in which it was to be tested at Oak Ridge. A decision  
10 has been made by DOE to conduct this testing at  
11 Pacific Northwest Laboratories. Testing is expected  
12 to begin in about three months and preliminary results  
13 are expected in the summer of 1990.

14 There are also WESF capsules in use at two  
15 other facilities. One of these is in Virginia and the  
16 other in Colorado. A Commission paper discussing the  
17 use of these capsules will be sent to you shortly from  
18 NMSS.

19 Regarding the Radiation Sterilizers  
20 facility, we plan to continue to provide increased  
21 headquarters and region attention until all capsules  
22 have been returned to DOE.

23 That concludes what I intended to say about  
24 that. Any questions?

25 Advanced Medical Systems. As you will

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1 recall, Advanced Medical Systems concerns related to  
2 the contamination of the facility, the need to make  
3 some facility modifications, and the need to determine  
4 if proposed staff changes were adequate for future  
5 operation. There has been some progress made since  
6 the May 1989 senior management meeting. The licensee  
7 has a contamination control program. We will continue  
8 to inspect this program as they increase the  
9 fabrication of sources. The program looks all right  
10 to us, but we have to continue to monitor it as it is  
11 implemented.

12 The hot cell contamination levels have been  
13 reduced. We have done an evaluation of the level in  
14 the hot cell now and have determined that further work  
15 to decontaminate it more is not justifiable.

16 A temporary hot cell ventilation system has  
17 been installed at the facility. The license was  
18 renewed in December of 1989. As part of this renewal,  
19 a schedule for designing and installing the permanent  
20 hot cell ventilation system has been tied down as a  
21 license condition.

22 The new radiation safety officer appears  
23 capable and technically competent according to my  
24 inspectors. He still needs, however, to gain  
25 knowledge and apply attention to the commitments and



1 requirements in the tie down condition of its  
2 licenses.

3 The fire protection modifications still need  
4 to be resolved between NRC and the licensee and we are  
5 working on that now.

6 We performed an inspection in late January  
7 and some concerns were identified and we plan to work  
8 with the licensee. In fact, we've already started to  
9 do that by telephone, but we will be meeting with the  
10 licensee to pursue those findings.

11 Based on the progress which has been made,  
12 we've concluded that the current level of enhanced  
13 regional attention is appropriate for this licensee.

14 Any questions on Advanced Medical Systems?

15 COMMISSIONER REMICK: Where are they  
16 shipping waste? Do they have any problem shipping the  
17 waste from the decontamination?

18 MR. DAVIS: One of our findings is that they  
19 haven't shipped enough waste yet and we have a  
20 commitment from them by telephone the other day that  
21 they would ship some remaining waste by the end of  
22 this year. They did, however, ship some during the  
23 decontamination to one of the burial sites. I think  
24 one of the problems with some of the waste that they  
25 still have is that the radiation levels in the drums

1 are higher than they can ship. So, they would have to  
2 repackage or something.

3 COMMISSIONER REMICK: Thank you.

4 CHAIRMAN CARR: All right. Region IV?

5 MR. DAVIS: I have 3M yet, sir.

6 CHAIRMAN CARR: Oh, excuse me.

7 MR. DAVIS: As you will recall, the concerns  
8 with 3M were related to their distribution of static  
9 eliminators which released polonium 210 microspheres  
10 at various general licensees' and some specific  
11 licensees' facilities. At the May '89 senior  
12 management meeting, we concluded that 3M should stay  
13 on the list of facilities requiring enhanced  
14 headquarters and region attention until the devices  
15 were retrieved and until proper management oversight  
16 was applied to the activities at 3M.

17 The license has been modified, distribution  
18 of the devices continues to be suspended and 3M is now  
19 permitted to manufacture these devices but to only use  
20 them for R&D purposes at their own facilities.

21 We performed an inspection of all 3M source  
22 productions in November of 1989. In that inspection,  
23 we found that their performance was acceptable, their  
24 quality control had improved, it is aggressive and  
25 competently done. Their performance could further be

1 enhanced with better and increased management and  
2 health physics monitoring of the programs. We have  
3 received commitments from the licensee along with a  
4 schedule to do management and HP audits on all of  
5 their source productions. We also felt that they  
6 could improve in their follow-up to problems with  
7 their devices and we have a recent instance where they  
8 have done that.

9 Based on all of this and our inspection  
10 results, we've determined that normal regional  
11 attention to 3M's operation is sufficient at this  
12 time.

13 Any questions?

14 CHAIRMAN CARR: Dennis?

15 MR. ROBERT MARTIN: Region IV, we have no  
16 facilities to discuss, either from the reactor  
17 facilities aspect or the materials facilities. We  
18 defer to Region V.

19 MR. JOHN MARTIN: We discussed the U.S.  
20 Testing situation and progress in the last few months  
21 and have concluded that the corrective actions the  
22 U.S. Testing has taken have proven to be effective the  
23 last six months or so and it also is suitable for  
24 normal level attention at this point. The last couple  
25 touches are being finalized on the enforcement package

1 for that case and that should be concluded in the next  
2 week or so.

3 CHAIRMAN CARR: Okay, Dennis?

4 MR. CRUTCHFIELD: Time for Browns Ferry.  
5 Browns Ferry is the remaining Category 3 plant from  
6 the list. It does require NRC authorization prior to  
7 restart. It has been on the list since 1986.

8 Major concerns we have left over from the  
9 June briefing revolved around the following areas.  
10 Engineering support was an area of concern to us. We  
11 were concerned about productivity levels, timeliness,  
12 quality of the activities that were going on. Since  
13 that time period, they have improved in their  
14 engineering support. They're using better judgment in  
15 when to go ahead and fix an area versus when to do  
16 some analysis and come in and discuss the analysis  
17 with the staff.

18 Their self-verification programs are still  
19 identifying concerns and problems. They're still  
20 finding seismic areas that didn't have the appropriate  
21 seismic design. They're still finding single failure  
22 vulnerabilities in the facility.

23 Overall though, the engineering program has  
24 improved. They have better control of their  
25 contractors, et cetera. So, we see an improving trend

1 in the engineering area. It still needs close  
2 monitoring, however.

3 Another area of concern last June was the  
4 organizational stability. They had just been into  
5 about six months of Mr. Kingsley's era and there was a  
6 large transition and a lot of people coming in at the  
7 management level and there was some down sizing going  
8 on also. The current staffing level at the facility  
9 remains at about 4500 people. of which approximately  
10 800 are contractors. So, there's still a very large  
11 staff there.

12 The managerial side has stabilized to some  
13 extent. The majority of the senior managers on-site  
14 have been there for a year to two years now, so we're  
15 seeing some stability and we're seeing the effects of  
16 some of the programs begin to take place down at the  
17 lower levels.

18 Schedule. Last summer we were talking about  
19 the schedule of October or so. They were in the  
20 process where they were evaluating their productivity  
21 measures, how well they could do the modifications,  
22 how well they could do the engineering. They  
23 completed that and projected a restart date of May of  
24 1990. However, recent identification of problems as  
25 part of their typical engineering process has

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1 indicated that it will likely slip another three to  
2 four months. So, we're looking at late summer, early  
3 fall before we'll be considering a restart decision.

4 They still have trouble predicting their  
5 schedule and meeting some of their schedules. An  
6 example is the equipment qualification inspection that  
7 the staff has planned. It's been postponed at least  
8 two or three different times. The most recent  
9 schedule now has it for the May time frame. Overall,  
10 the transition from shutdown to an operating plant is  
11 beginning to take effect.

12 Last summer, they had a requalification exam  
13 where a number of reactor operators and SROs that were  
14 up for requalification failed. The program remained  
15 in an unsatisfactory state. We retested them here  
16 just this past month, and of 20 candidates they put  
17 up, all 20 had passed. We noted some strengths in the  
18 simulator area, as well as the written exam area, so  
19 it seems as though they've taken a hold there and  
20 gotten their show in order.

21 They plan an operational readiness  
22 assessment team of their own, which will be done by a  
23 mixture of TVA and outside folks. This is already  
24 underway. It began this month. The staff is planning  
25 one later on this year, probably the April-May time

1 frame.

2 We look at our inspection results and we see  
3 mixed inspection results. Appendix R results were  
4 very good. The maintenance team inspection, they  
5 turned out to be very good. They had an emergency  
6 preparedness drill last November. That turned out a  
7 very positive for them.

8 We're still seeing problems in the  
9 surveillance area. We had them in for an enforcement  
10 conference in September. It appears as though they're  
11 beginning to take hold. Procedures are being well-  
12 written. People are beginning to adhere to those  
13 procedures now as they do their surveillances. So  
14 what was originally a down in the early part of the  
15 period had now turned around and become an improving  
16 trend.

17 We're still concerned about root cause  
18 evaluations and their ability to do SERs on things  
19 like unreviewed safety questions, et cetera. We do  
20 see a change. It's a slow change from the  
21 organization, but it's a change nevertheless.

22 As I mentioned, the EQ inspection has been  
23 put off, but we think they will meet the prerequisites  
24 about the time of April-May time frame. The type of  
25 prerequisites we're asking for are for them to have

1 most of their binders taken care of and the majority  
2 of their hardware modifications in place, as well as  
3 whatever maintenance requirements they had in place.

4 I guess if I would look at it in summary, we  
5 see some improvements. The programs that they have in  
6 place are generally pretty good. We're now following  
7 the implementation. I think the implementation is  
8 what will take them some time.

9 COMMISSIONER REMICK: Who are they using for  
10 the operational readiness review? You indicated an  
11 outside contractor.

12 MR. CRUTCHFIELD: They're doing folks from  
13 some of their other sites, as well as they're bringing  
14 in some individual consultants. I don't know who they  
15 are.

16 CHAIRMAN CARR: Any other questions?

17 MR. TAYLOR: Mr. Chairman, that concludes  
18 the briefing.

19 We do have Mr. Miraglia ready to address the  
20 question on the Combustion Engineering pressurizer  
21 tube reaming and its potential generic implications.  
22 It will just take a minute, if we may.

23 MR. MIRAGLIA: Thank you, Jim.

24 I'm Frank Miraglia, Associate Director for  
25 Inspection and Technology Assessment, NRR.



1           With respect to the generic aspects of the  
2           pressurizer heater cracking, the staff did work with  
3           the Combustion Engineering owners group. As was  
4           indicated by Mr. Russell, the cracks at Calvert Cliffs  
5           2 were axial cracks and appeared to be a result of  
6           stress rises based upon pre-installation reaming of  
7           those tubes. Inspections on Unit 1 did not show any  
8           signs of cracking, and there was no pre-installation  
9           reaming of those heater tubes. Cracking of Inconel  
10          600 has been seen, steam generator tubes, and we have  
11          also experienced signs of cracking in other areas.  
12          There's also been some foreign experience.

13                 The Combustion Engineering owners group has  
14                 looked at the pressurizer heaters and has recommended  
15                 a visual inspection program for those thermal sleeves  
16                 for the CE reactors. They're looking for  
17                 inspection/installation practices, type of material,  
18                 tensile strength of material.

19                 As a result of these activities, the staff  
20                 has now an information notice in preparation, which  
21                 will probably be issued this month, which summarizes  
22                 the experience to date and the thought process being  
23                 to inform the industry, indicate that this type of  
24                 cracking has been experienced. The industry is aware  
25                 of it in steam generator tubes, and it would be

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1 prudent for them to examine the application of Inconel  
2 600 in their facilities and the primary system  
3 boundaries, and augmented inspections may be warranted  
4 based upon what they see the applications of that  
5 material to be.

6 CHAIRMAN CARR: Questions? Any further  
7 questions for the --

8 COMMISSIONER REMICK: Just a comment. I am  
9 pleased that the staff provides acknowledgement and  
10 kudos to the four plants that have done an outstanding  
11 job, the ones identified by Mr. Snizek. And I hope  
12 that those plants will continue to do a good job and  
13 not become complacent. Being an idealist, I would  
14 also hope that their customers and their utility or  
15 service commissions would appreciate the job they're  
16 doing and continue to support them so that they can  
17 maintain those high standards. But I think it's a  
18 good idea to openly identify those people doing a good  
19 job.

20 CHAIRMAN CARR: Thank you.

21 Commissioner Roberts?

22 COMMISSIONER ROBERTS: Well, you also -- and  
23 I think your terminology, 'gave us the honorable  
24 mentions. And I think that's fine.

25 But my question is, there were ten other

1 plants discussed. And one would assume they were  
2 discussed because they were potential candidates for  
3 either Category 2 or Category 3. And my question is,  
4 do those licensees know that they were discussed?

5 MR. TAYLOR: No, we have not specifically  
6 made notification of those licenses.

7 COMMISSIONER ROBERTS: Well then, my next  
8 question is a rhetorical one, maybe, for us. I wonder  
9 if they should be? And I'm not looking for an answer.

10 MR. TAYLOR: I'll await any direction from  
11 the Commission. Some of these, you know, we see. I  
12 made the remark that I'm pleased to see slipping  
13 performance being acted on. And in most of the cases  
14 that we were talking about where we've seen some  
15 problems, what the utility is doing encourages us that  
16 they're turning it around before it gets to the point  
17 where we're, you know, concerned enough to call them a  
18 problem facility. So that's an encouraging thing to  
19 me that we were able to work through these other  
20 plants and conclude that what was going on, at least  
21 at this time, said that where events and significant  
22 issues were occurring they were being taken care of.

23 COMMISSIONER ROGERS: Well, I would assume  
24 that any of those plants that a regional administrator  
25 comes with on his list to talk about, that they've

1 already been discussing their concerns --

2 MR. TAYLOR: Yes.

3 COMMISSIONER ROGERS: -- with those plants  
4 before they even come to the meeting, so that the  
5 plants are not unaware that there are matters of some  
6 concern to the regional administrator and therefore  
7 the Commission.

8 MR. TAYLOR: You're correct.

9 CHAIRMAN CARR: Well, and the purpose of the  
10 review primarily is to decide where we want to focus  
11 our emphasis and additional resources. And I think if  
12 they see additional emphasis, they'll be able to  
13 recognize who's being looked at a little more  
14 carefully. We just decided they didn't quite warrant  
15 a --

16 MR. TAYLOR: This is not a secret.

17 MR. SNIEZEK: I don't believe it would come  
18 to the surprise of any plant if they found themselves  
19 on a list that they never knew that they were getting  
20 into that type of a situation. I think we want to  
21 avoid anything like a big surprise.

22 CHAIRMAN CARR: But your point is well  
23 taken. I think we can take a look at do we want to  
24 give them a heads-up letter that says you were close,  
25 but not that close.

1 COMMISSIONER ROBERTS: Also, remember you've  
2 got to talk about something.

3 CHAIRMAN CARR: Commissioner Rogers?

4 COMMISSIONER ROGERS: No, thank you.

5 CHAIRMAN CARR: Commissioner Curtiss?

6 COMMISSIONER CURTISS: I have two questions  
7 of a generic nature that I guess I'd like to ask.

8 First, just an observation. I am pleased to  
9 see that the problem plant list has worked down to the  
10 lowest number of plants on the list that we've had  
11 since I think it was instituted, and I attribute that  
12 in large measure to the efforts of the utilities, but  
13 not to an insignificant degree to the efforts of the  
14 regional offices in working with those utilities to  
15 improve -- see that their performances improved.

16 I guess I have a generic question on the  
17 issue of when it is that we know that a plant ought to  
18 come off of the problem plant list. And what I'd like  
19 to ask maybe individually for the regional  
20 administrators is to share just your perspective on  
21 what it is that you see at a plant when you have  
22 reached the point that you're prepared to recommend  
23 that it come off the list. What sort of evidence are  
24 you looking for when you make that decision? Maybe  
25 just begin in chronological order.

1 MR. SNIEZEK: Commissioner Curtiss --

2 COMMISSIONER CURTISS: Go ahead.

3 MR. SNIEZEK: -- can I address that from a  
4 generic standpoint? That's one of the things before  
5 the senior management that we put out. We haven't  
6 used this criteria before, but we put out the criteria  
7 that we would try to use as a common base for the  
8 judgement.

9 We looked at such things as: have the root  
10 causes been identified and corrected, with about four  
11 or five subcategories under that that we wanted to  
12 evaluate; is there improved self-assessment and  
13 problem resolution, again with four or five  
14 subcategories under that that we wanted to  
15 specifically talk about and make a judgement on the  
16 plants; how effective is licensee management  
17 organization and oversight, again with three or four  
18 categories under that; is our NRC assessment of the  
19 effectiveness complete yet. Those are the key things  
20 that we looked at.

21 And there are probably a total of about 20  
22 attributes that we used in our overall judgement when  
23 we listed the plants, with, yes, they're meeting it,  
24 partially meeting it, or completely meeting it. And  
25 from there, it pretty clearly unanimously fell out

1       which three plants should move from Category 2 to  
2       Category 1.     With that as generic, maybe if the  
3       regional administrators want to address any of the  
4       specifics --

5               MR. DAVIS:     Well, I could address Fermi.  
6       There are a number of things that went through my mind  
7       before I reached the point of recommending that it be  
8       taken off the list.

9               I looked at the senior management and tried  
10      to determine how effective they were.

11              I looked at their new plant manager and  
12      assessed his effectiveness.

13              I looked at their operations superintendent  
14      and assessed his effectiveness.

15              We conducted monthly meetings at the staff  
16      level with the company.     And on about a quarterly  
17      basis, a senior manager from the region would sit  
18      down.

19              We receive a monthly performance report from  
20      the licensee, where we can look at the things that  
21      they track to determine how well they're doing.

22              I sent a special team up, including some  
23      operator licensing people from my region, to review  
24      the training and to make an assessment of the ability  
25      of the operators to handle off-normal events and

1 routine events.

2 Based on all of that, the conclusion was--  
3 my conclusion was that I should recommend that they be  
4 taken off the list. Some of my staff were a little  
5 queasy about that recommendation. I think the  
6 decision now speaks for itself. Fermi, although they  
7 still have some problems, have performed since we took  
8 them off the list in the way that I had projected and  
9 hoped. It turned out all right.

10 MR. TAYLOR: I might note, that was the last  
11 senior management meeting that Fermi was taken off.

12 MR. DAVIS: That's the last one I had.

13 COMMISSIONER CURTISS: Okay.

14 CHAIRMAN CARR: Well, I think it's kind of  
15 fair to say, wouldn't it be -- are they aware of their  
16 problems or are they doing something about them? And  
17 is what they're doing effective?

18 MR. TAYLOR: That's a shorthand way of  
19 saying it.

20 CHAIRMAN CARR: Kind of a quick nutshell.  
21 Are we surprising them with what we know about their  
22 plant they don't?

23 COMMISSIONER CURTISS: Let me raise a second  
24 question that really goes beyond problem plants, but  
25 it seems to me that it has the potential for cropping



1 up in this area in particular.

2 As we focus increased attention on what I'll  
3 call self-assessment programs, the utilities self-  
4 identifying their problems through self-SALPs and  
5 SSFIs and the other vehicles that we use for  
6 encouraging utilities to identify their own problems,  
7 obviously that's going to generate a certain amount of  
8 focus and attention on problems, particularly in the  
9 design basis area where they're going to go in and if  
10 the program is effective it's going to find whatever  
11 problems exist.

12 As you look at the question of how you  
13 assess difficulties at a plant, problems that have  
14 arisen, and in particular with a focus on the self-  
15 identified problems of the utility, what is the  
16 thinking process? What is the waiting that goes into  
17 the fact that a problem may be self-identified through  
18 a utility-initiated program? And, as I say, not just  
19 in the problem plant area, but for plants generally,  
20 how do you approach problems that crop up through a  
21 self-identification program?

22 MR. TAYLOR: We encourage and accept -- in  
23 fact, if you're talking about design review and design  
24 reconstitution, the capability to do that really lies  
25 within the utility itself. So in many of them,

1 particularly in the older stations, they've got very  
2 on-going active programs to do that. It does not  
3 surprise us that they find some deficiencies and  
4 problems when they get in and go back and do these  
5 analyses. We encourage that, and in fact give them  
6 credit for so doing, because that then avoids a  
7 potential engineering complication contributing to an  
8 event. And so basically, I would say -- maybe the  
9 regional administrators want to add --

10 MR. RUSSELL: Let me give you a couple  
11 examples of how we do that, consistent with the  
12 Commission's policy as it relates to enforcement  
13 matters.

14 In the event that a utility self-identifies  
15 a problem, and it's not an issue that we would  
16 consider for escalated enforcement, but they've  
17 identified it and they've identified the corrective  
18 action that they're going to take, we have the ability  
19 to not cite that as a violation. We characterize it  
20 as a not-cited violation in the inspection report. So  
21 that's one vehicle that can be used. There has been  
22 some concern that we have not used it sufficiently,  
23 and there have been cases where utilities have  
24 identified issues that we have not appropriately  
25 characterized. We've sort of claimed them as an issue

1 for a violation, as if the NRC had identified it.

2 In the area of escalated enforcement, we  
3 have the capability to completely mitigate a civil  
4 penalty if the item is identified by the licensee, the  
5 corrective actions are prompt and extensive, and we  
6 actually go through a review of the mitigating  
7 factors. And we have done that.

8 The most important element of the whole  
9 issue is whether the utility has an effective program  
10 for finding and correcting its own problems. And if  
11 that's the case, that falls under the broad umbrella  
12 of quality assurance, and we look at those programs  
13 for their effectiveness. And we would tend to  
14 evaluate the program and not pull out of that program  
15 the individual items. And so that's what's allowed  
16 under the framework of the policy, and that's what we  
17 attempt to implement within the regions. We have some  
18 room for improvement as we do that. We'll be talking  
19 to you about that later.

20 MR. EBNETER: I think we've had the same  
21 experience, but there is a general concern on the  
22 utilities that we do not use indiscretionary  
23 enforcement. They do not think they get enough credit  
24 for self-identification, especially through the design  
25 basis reconstitution.

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1 MR. TAYLOR: That's in the survey. That  
2 came up in our survey and we're probably going to be  
3 looking at that.

4 COMMISSIONER CURTISS: Okay. Good. That's  
5 all I have.

6 COMMISSIONER ROGERS: What role to the SALPs  
7 play at your management meeting? How important are  
8 they? What else is important? Are they sufficiently  
9 timely to be of value in this? Have you found any  
10 serious discrepancies between what a SALP seems to say  
11 and what the group seems to feel about a particular  
12 plant that is not -- a discrepancy not just purely  
13 attributable to a time lag in the SALP?

14 MR. SNIEZEK: Yes. I don't think we've  
15 found any serious discrepancies, other than the time  
16 lag discrepancy, because the SALP tells us where we've  
17 been, where the utility has been. And the senior  
18 management meeting brings in other aspects. It brings  
19 in where are they as far as implementation of generic  
20 safety issues and USIs, what big things are  
21 outstanding. It brings in the research perspective  
22 from the PRA insights. It brings in the AEOD  
23 perspective on the performance indicators, what  
24 they're showing us. It brings in the SALP input. And  
25 then it brings in the most recent inspection

1 experience with the performance of the utilities from  
2 the regional administrators. So it's a more current  
3 timely effort than the SALP. But the SALP sets the  
4 background and really tells us where the utility has  
5 been. And the more current the SALP, the more useful  
6 it is to the senior management meeting process.

7 There have probably been one or two  
8 occasions where the senior management meeting came out  
9 with a different decision than the most recent SALP.  
10 A case may have been Peach Bottom, when we had the  
11 Peach Bottom action a while back and the information  
12 hadn't been tied together in a timely enough fashion,  
13 where that was tied together before and during the  
14 senior management meeting. But we see the SALP as a  
15 real contributor, but definitely not the only thing.  
16 There are a lot of other inputs we have to rely upon  
17 to reach a timely current decision.

18 CHAIRMAN CARR: In view of the reduction of  
19 Category 2 plants by half, does the staff feel that  
20 we're seeing an overall improvement across the board  
21 out there in performance?

22 MR. TAYLOR: Yes. I think everything that  
23 we look at, significant events, the Oak Ridge reviews,  
24 tells us that safety performance is improving. That's  
25 a generally broad term, but I think the rest of you

1 would say that.

2 MR. SNIEZEK: There is some slipping and  
3 sliding on individual facilities, as you may notice.  
4 One of the facilities we had as a good performer last  
5 time wasn't mentioned this time. They haven't fallen  
6 far, but they fell just a little bit, so we decided  
7 not to mention them.

8 CHAIRMAN CARR: Well then, you foresee a day  
9 when there may be no two or three facilities on our  
10 list?

11 MR. TAYLOR: It's possible. I'd like to see  
12 that.

13 CHAIRMAN CARR: But in that case, I'm sure  
14 we'd still have 10 or 15 for discussion if you all  
15 brought in your two or three worst plants, right?

16 COMMISSIONER ROGERS: Somebody's got to be  
17 in the bottom half of every --

18 COMMISSIONER ROBERTS: Absolutely.

19 CHAIRMAN CARR: Complacency is what we'd  
20 warn them against, I guess.

21 Well, I'd like to thank each of you for the  
22 briefing. I think it's a valuable thing you're doing  
23 to meet, go over the plants, swap ideas and opinions,  
24 and hopefully we can level out the regulatory  
25 differences among the various regions and approaches.

1 We appreciate your valuable insights into the  
2 performance of the licensees, and we support your  
3 continuing efforts to improve our ability to carry out  
4 our mission through the most efficient and effective  
5 use of the resources.

6 I'm encouraged to note that three facilities  
7 have been removed from the Category 2 list, and that  
8 no facilities have been added. For those facilities  
9 that remain Category 2, the staff should continue to  
10 closely monitor their efforts to improve performance.

11 I'm also aware that a number of other  
12 facilities were considered candidates for Category 2,  
13 based on recent performance problems. In many cases,  
14 the decision was made not to place them on the list as  
15 a result of their having recognized their own problems  
16 and having instituted corrective action programs.  
17 Well, this is a clear example of the system working.  
18 The staff should also monitor the effectiveness of  
19 these programs to ensure the results are achieved.

20 Any of my fellow Commissioners have any  
21 other comments?

22 If not, we stand adjourned.

23 (Whereupon, at 10:41 a.m., the above-  
24 entitled matter was concluded.)  
25

CERTIFICATE OF TRANSCRIBER

This is to certify that the attached events of a meeting  
of the United States Nuclear Regulatory Commission entitled:

TITLE OF MEETING: PERIODIC BRIEFING ON OPERATING REACTORS AND  
FUEL FACILITIES

PLACE OF MEETING: ROCKVILLE, MARYLAND

DATE OF MEETING: FEBRUARY 15, 1990

were transcribed by me. I further certify that said transcription  
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\_\_\_\_\_

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**PERIODIC BRIEFING ON STATUS OF  
OPERATING REACTORS**

**COMMISSION BRIEFING  
FEBRUARY 15, 1990**

**CATEGORY 1**

**PLANTS REMOVED FROM THE**  
**LIST OF PROBLEM FACILITIES**

**PEACH BOTTOM 2 & 3**  
**PILGRIM**  
**TURKEY POINT 3 & 4**

**CATEGORY 2**

**PLANTS AUTHORIZED TO OPERATE**  
**THAT THE NRC WILL MONITOR CLOSELY.**

**CALVERT CLIFFS 1 & 2**  
**NINE MILE POINT 1 & 2**  
**SURRY 1 & 2**

**CATEGORY 3**

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

**BROWNS FERRY 1, 2, & 3**

## ADDITIONAL NMSS FACILITIES DISCUSSED

- o 3M Company - St. Paul, MN
- o Advanced Medical Systems - Cleveland, OH
- o US Testing Company - Hoboken, NJ

## **PRIORITY NMSS FACILITIES**

- o Combustion Engineering - Windsor, CT**
- o Safety Light Corporation - Bloomsburg, PA**
- o Radiation Sterilizers Inc. - (WESF Capsules)**