

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Title: PERIODIC BRIEFING ON OPERATING REACTORS AND FUEL FACILITIES

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

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4 PERIODIC BRIEFING ON OPERATING REACTORS AND FUEL FACILITIES

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6 PUBLIC MEETING

7 ***

8 Nuclear Regulatory Commission
9 One White Flint North
10 Rockville, Maryland

11
12 Wednesday, July 13, 1988
13

14 The Commission met in open session, pursuant to
15 notice, at 1:00 o'clock, p.m., the Honorable LANDO W. ZECH,
16 Chairman of the Commission, presiding.

17 COMMISSIONERS PRESENT:

18 LANDO W. ZECH, Chairman of the Commission
19 THOMAS M. ROBERTS, Member of the Commission
20 KENNETH CARR, Member of the Commission
21 KENNETH ROGERS, Member of the Commission
22
23
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25

1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 V. STELLO

3 G. SLOJBLOM

4 J. MARTIN

5 B. MARTIN

6 N. GRACE

7 B. KANE

8 C. PAPIERELLO

9 H. THOMPSON

10 T. MURLEY

11 J. PARTLOW

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P R O C E E D I N G S

[1:00 p.m.]

CHAIRMAN ZECH: Good afternoon, ladies and gentlemen.

Today's meeting is a periodic meeting by the staff to brief the Commission concerning the status of operating reactors and fuel facilities. I understand that part of this meeting will involve identification and discussion of those licensees that NRC senior management discuss in their semi-annual meeting and determine required increased NRC attention and resources.

I welcome each of our regional administrators and the director of special projects who are here with us today and will be available to participate in the briefing and answer our questions. I'd particularly like to welcome Mr. James Partlow who has become the director of the Office of Special Projects on the first of July. Welcome, Jim.

I understand a copy of the slides to be used during the presentation are available at the entrance of the room. Do any of my fellow Commissioners have any opening comments to make? If not, Mr. Stello, you may begin.

MR. STELLO: Thank you, Mr. Chairman. What we propose to do this afternoon is to go through a briefing on the operating reactors, the results of our meeting and then very quickly rearrange those of us here at the table and then move into the materials licensing so we'll be doing it in two briefings.

1 We will also -- since there's been considerable
2 interest in the issue of the transient at La Salle -- we will
3 include a brief status report on where we are with respect to
4 that issue at the tail end of the briefing.

5 Before I turn over to Dr. Murley who will give you a
6 brief summary of our meeting and the results and then turn to
7 each of the regional administrators to give further
8 amplification of the particular units in their region, I might
9 want to suggest to the Commission that I think that these
10 meetings are in fact proving to be extremely beneficial to us.
11 We believe that we're getting better at identifying problems
12 earlier and hopefully we'll be able to communicate better with
13 the licensees as to what we believe those problems are and get
14 them corrected earlier.

15 I believe that that is an important step in the
16 regulatory process that will significantly improve the safety
17 of the plant and we believe over the long haul, will also show
18 significant improvement in performance. In fact, what we will
19 do today is to describe what we believe is again, for us, an
20 indication that the overall safety of plants is in fact
21 increasing and we think we are able to determine that better
22 and better not only from our own judgment but from a
23 quantitative sense.

24 That the information we have now shows that plants
25 indeed are safer this year than they were in the past years and

1 we think that if we continue what we're doing, they're even
2 going to get better in the future.

3 With that brief introduction, I'll ask Dr. Murley to
4 begin the briefing and then we will go through the details of
5 each of these reactors and whatever questions the Commission
6 may ask whatever you feel the need to ask -- it would be
7 appropriate during the briefing.

8 CHAIRMAN ZECH: Thank you very much. Dr. Murley, you
9 may proceed.

10 MR. MURLEY: Thank you, Mr. Chairman. The senior
11 managers met in King of Prussia June 28 and 29 -- the people at
12 the table here plus others of the senior staff and we discussed
13 the performance of operating reactors and as well as fuel
14 facilities which Hugh Thompson will talk about.

15 This is our fifth meeting. We do this about twice a
16 year and we now think that we've got the -- I think our
17 analysis system so that it's working fairly smoothly. At
18 least, I'm satisfied. NRR reviews throughout the year all the
19 operating reactors. Virtually weekly, I sit down with my
20 project managers, and we systematically go through the status
21 of the plants so that routine review will generally hit each
22 reactor in the country about twice a year.

23 In addition, before these senior management meetings,
24 I sit down with the regional administrators and AEOD which we
25 did in April of this year, and we review all of the plants in

1 each of the five regions. From these screenings meetings then,
2 we selected the plants that we want to discuss at the senior
3 management meeting.

4 You can see, it takes a lot of staff effort. I think
5 it's worth it. I think we're on the right path to improve
6 safety, as Vic said. Today we'll discuss the highlights that
7 came out of that senior management meeting. Not all the plants
8 that we discuss at the meeting necessarily have problems.

9 Sometimes, we just want to discuss trends. Sometimes
10 we pick a specific issue that we talk about and you recall that
11 last time when we briefed you in December, we mentioned that we
12 had reviewed all the newly-licensed plants as a class. So,
13 it's not always that plants that we discuss have problems.

14 Along these lines, today when we discuss the plants,
15 we're necessarily going to focus on the problems but we
16 shouldn't lose sight of the overall trend of operational
17 performance that we're seeing here in the United States. We
18 think that the trend of performance is improving. In April,
19 you'll recall, Ed Jordan briefed the Commission on performance
20 indicators.

21 In addition to that, there is one study that I think
22 needs more elaboration and I'll just highlight it briefly today
23 and that's a study of precursors to potential severe core
24 damage accidents. This is a public report that was done by Oak
25 Ridge.

1 What they do is take the operational data from LERs
2 and they screen the information for significant precursors and
3 then they put it in a model that comes out of PRA studies and
4 from that then they can infer core damage frequency for all of
5 the plants as a whole in the United States. There's two
6 conclusions that I'll mention that come out of the report. One
7 is that the inferred core damage frequency has been steadily
8 declining over the years and appears to be steadily declining.

9 The second point is that they mentioned in 1986 a
10 number of the plants that in past years had shown precursors in
11 this study were shut down for much or all of 1986 which
12 indicates to us that we are focusing on the right plants and
13 that it is showing up in the statistics and that's having an
14 impact on safety.

15 So with that context then I think if I could have the
16 first slide, I'll talk briefly of what the plants are and then
17 each of the regional administrators will talk in detail about
18 each plant.

19 [Slide.]

20 Category one plants are those that we've removed from
21 the list of our problem facilities. In this category, Fort St.
22 Vrain is a plant that we've moved up into this list. Second
23 slide, please.

24 [Slide.]

25 Category two plants are those that are authorized to

1 operate but that nonetheless NRC headquarters in the region
2 continue to monitor closely. There's two new plants that we've
3 added to this category -- Nine Mile Point 1 and Fort Calhoun.
4 We'll discuss these plants and why we think we need to watch
5 them more closely.

6 In addition, Sequoyah Unit 2 and Rancho Seco have
7 restarted during the past few months and as a result, they have
8 moved up from the category three plants into this category.

9 In addition, Turkey Point 3 and 4, Dresden 2 and 3
10 and Fermi -- their status remains unchanged. Could I have the
11 next slide, please?

12 [Slide.]

13 Third category of plants are those that are shut down
14 and that require NRC authorization to resume operation and
15 those we will of course monitor closely. Those are Peach
16 Bottom 2 and 3, Pilgrim, the Browns Ferry units and Sequoyah 1.

17 The situations there generally are well-known to the
18 Commission and their status has not changed significantly.
19 So that summarizes the plants and now I think we'll go region
20 by region and we'll start with Jack Martin in Region V and
21 he'll discuss Rancho Seco.

22 CHAIRMAN ZECH: Thank you, Jack. You may proceed.

23 MR. J. MARTIN: Rancho Seco was permitted to restart
24 in March which it did on the 31st of March and has been in a
25 testing status since then. They spent a month or so at about

1 25 percent power and in the last 8 weeks or so at 40-45 percent
2 power and just over the last weekend went up to 65 percent
3 power.

4 Very gradual, very deliberate, basically
5 conditioning, both the people and testing the equipment.
6 There's been a number of difficulties that they found with the
7 equipment that can be corrected at low power without incident
8 which I think made that drawn-out test program a rather wise
9 thing to do.

10 They expect to continue at 65 percent power for
11 another two or three weeks and then go up to 80 percent power
12 where they will have a plant trip and some of the more involved
13 testing.

14 Fortunately, there's not a whole lot to report.
15 Nothing very exciting has happened. Our observations are that
16 the people have been performing well. The equipment has
17 performed well. As I said, there hasn't been any major
18 challenges, so it's a little difficult to tell how they might
19 perform under stress. So, my evaluation so far is that plant
20 operation on the whole has been good.

21 The situation involving the headquarters and the
22 board of directors continues to be somewhat unsettled. In the
23 last month or so, there was another major rearrangement where
24 the general manager, Mr. Burn, was released and replaced with
25 someone else and Carl Andonini decided at that point, was a

1 good time for him to leave as well.

2 Apparently they were unrelated. So, he's been
3 replaced with Joe Ferlitt who was the plant manager and the
4 best I can tell, it's a fairly smooth transition. I don't see
5 a lot of repercussions at the site, but these sorts of things
6 are always somewhat bothersome until they settle down and the
7 best I can tell, that's being done.

8 This fall, they have a five member board of directors
9 which is elected and it's my understanding there are three of
10 them up for reelection. I believe they've all three decided
11 not to stand for office again, so there -- at least there's the
12 prospect for some more confusion that we'll have to keep our
13 eye on, but at the moment, I don't see a whole lot of
14 connection between what's going on at corporate headquarters
15 versus what's going on at the plant but it's something I feel
16 anxious about.

17 COMMISSIONER ROGERS: Does that three include the
18 Chairman?

19 MR. J. MARTIN: I don't believe so.

20 CHAIRMAN ZECH: Does that complete your presentation?

21 MR. J. MARTIN: That's all I had to say.

22 CHAIRMAN ZECH: Before we move on then, are there any
23 other questions, my fellow Commissioners? All right, you may
24 proceed then. Bob Martin.

25 MR. B. MARTIN: There are two Region IV plants that I

1 wish to brief you on. The first will be Fort St. Vrain. Fort
2 St. Vrain is a plant as Tom has mentioned that has been
3 identified as being removed from the list of problem
4 facilities. In the six months since the last senior management
5 meeting, if you may recall, just prior to the last senior
6 management meeting where St. Vrain was discussed and continued
7 on the list, they had experienced a hydraulic oil fire and they
8 were just coming out of that outage. So, we had not had a
9 chance to assess their performance. However, over the last six
10 months, this most recent six month's period, their performance
11 has really demonstrated to us a good discipline, a good
12 operational performance, a good approach to the handling of
13 issues.

14 During this six months, they had two months of
15 operation at which they set in those two months the all time
16 records for monthly power production out of the St. Vrain
17 facility which clearly those of you who are familiar with the
18 history of the plant, has had a mixed history over the past ten
19 or fifteen years in terms of power production.

20 So, they had two excellent running months. They also
21 had to withstand an operational challenge. They had a rupture
22 of some flexible boots in the circulator water system and they
23 withstood that technical challenge well. They repaired it.
24 Recovered from it. Resumed operation. Our safety team
25 inspection that was conducted in May basically found an

1 excellent discipline, an excellent attitude toward safety, a
2 good operational worth ethic.

3 That is not to say that there are not some continuing
4 difficulties or issues that have to be pursued with regard to
5 certain maintenance, procedural adequacy, control over certain
6 maintenance activities. The issue is that there's sufficient
7 flexibility in the NRC inspection program and the licensing
8 relationship and oversight afforded through the routine
9 activities to really adequately monitor those activities.

10 So we do not feel it warrants the special NRC
11 attention that's required of plants that are identified on this
12 list. So as a consequence of that, we believe that they can
13 move off of the list of what has been known as problem
14 facilities.

15 In terms of current status, Fort St. Vrain is now
16 currently in a 14-week circulator outage. There were technical
17 issues identified on some bolting material that had to do with
18 stress corrosion cracking of bolting material. They made a
19 commitment to NRR that they would take the unit off the line on
20 this schedule to replace those bolts and inspect the
21 circulators.

22 That activity is underway. They're in the first ten
23 days of that outage at the present time and it will be about 14
24 weeks in total before they resume operation. If there are no
25 questions relative to Fort St. Vrain, I'll move on to Fort

1 Calhoun.

2 CHAIRMAN ZECH: Proceed please.

3 MR. B. MARTIN: All right. In the case of Fort
4 Calhoun, the concerns that have been identified and discussed
5 at the senior management meeting which have led us to
6 collectively conclude that it warrants additional NRC-wide
7 attention primarily has to do not with the operating
8 performance of the plant itself which quite frankly sets
9 records and operates extremely well in terms of its routine
10 operation.

11 The issues that have concerned us and become much
12 more apparent to us is the depth of their ability to withstand
13 complex challenge when it occurs -- complex technical
14 challenges in terms of component failures, the depth of
15 critical questioning that they apply when reviewing
16 modifications, planned changes, implications of maintenance.
17 So if you will, it's in the engineering strength, not
18 necessarily in the technical capability of any one engineer,
19 but rather in their systems to critically review and look at
20 the work that they are doing..

21 This issue was being identified to them earlier. The
22 issue is not resolved at this moment, but what the company has
23 done is retained the services of Stone and Webster to come in
24 and do a comprehensive review of their overall management
25 effectiveness focusing very heavily on their technical

1 effectiveness.

2 That review has been completed and was provided to
3 the company by Stone and Webster. We have been briefed on the
4 essentials of it in late June. In August, the company has made
5 a commitment to come back to us with what actions the company
6 is going to take on those recommendations. Therefore, the
7 follow-up actions that we plan to take over the next six months
8 in terms of where do we focus our activities or what kinds of
9 evaluation activities get conducted will depend very heavily on
10 not only the comprehensiveness but also the quality of the
11 actions that the Omaha Public Power District will be taking on
12 those recommendations.

13 Thus far on their own initiative, the company has
14 made a number of organizational changes. They have basically
15 collected all of their nuclear activities under if you will a
16 nuclear vice president. Previously engineering was separated
17 from the operations side of the house. That has now all been
18 brought together under one organizational structure.

19 They have made a number of organizational commitments
20 and improvements that they plan to undertake but what we
21 basically, I believe, are saying is that our activities in the
22 near term are going to have to be focused on the effectiveness
23 of those changes, what kind of a schedule they're trying to
24 implement them on and how successful they are in bringing them
25 about.

1 We are still at this moment betting on the come as
2 far as what we anticipate will happen. So for these reasons,
3 the plant has been placed on the list warranting additional
4 attention.

5 I think that would constitute the majority of my
6 comments, unless there are questions.

7 CHAIRMAN ZECH: Any questions, my fellow
8 Commissioners? Mr. Rogers?

9 COMMISSIONER ROGERS: Yes. Is that a new person,
10 this Vice President-Nuclear?

11 MR. B. MARTIN: Yes, sir. He was the Vice President
12 for Production, and he has assumed under his responsibilities,
13 the engineering capability that had been provided through a
14 different department of the company.

15 COMMISSIONER ROGERS: Does that mean the engineering
16 will be moved onto site, or will there still be off-site?

17 MR. B. MARTIN: There will be -- the responses of the
18 company and the recommendations of Stone and Webster with
19 regard to the engineering capability overall, includes a number
20 of things -- the usage of system engineers, which will involve
21 25 or so engineers. They will probably be on-site. They are
22 going to institute -- they will be on-site.

23 They are going to institute a safety review group to
24 enhance that critical self-questioning, hopefully. That safety
25 review group is expected to be on-site. There will also be

1 some enhancement of design engineering capability which will --
2 it's location, I think, is more up for discussion and
3 development of alternatives. That's not as clearly defined.
4 So there are elements, depending on which parts you focus on.

5 CHAIRMAN ZECH: Just a comment -- you pointed out
6 that in your judgment, the engineering strength is not as
7 strong as it perhaps should be. The fact that they've hired
8 Stone and Webster, I guess that's a licensee action, I believe
9 you pointed out.

10 MR. B. MARTIN: Yes, sir, it was.

11 CHAIRMAN ZECH: To do that, would certainly be the
12 right approach, it seems to me and I think it's important for
13 you to follow what they have recommended and to follow what the
14 licensee determines appropriate action with regards to those
15 Stone and Webster recommendations.

16 Are we doing our own analysis, review of engineering
17 strength? Are we taking on any -- what are we doing to follow
18 through on that engineering strength condition at Fort Calhoun?

19 MR. B. MARTIN: Well, in one respect, for example,
20 Fort Calhoun was the first organization, first licensee at
21 which we did a safety system outage modification inspection, a
22 SSOMI inspection. It was from the results of that inspection
23 that we started to develop a much better perspective about the
24 strength of their engineering capability because the issues we
25 had developed during the SSOMI.

1 Shortly after that, they had the event which involved
2 the ingress of water into their instrument air system, and
3 their ability to withstand that challenge and our rather
4 detailed look, both NRR and the region, at their capability of
5 handling; one, the significance of that event, the
6 comprehensiveness of their response, their corrective actions,
7 work that they have done since then, which has kept us involved
8 and has, if you will, added to that perspective.

9 It was the concerns developed during that phase,
10 expressed to the company, which I believe, amongst others,
11 prompted them to have Stone and Webster come in and look at
12 their overall effectiveness. So, these things, if you will,
13 are building on each other.

14 Now, the way to best monitor improvements, changes,
15 things that are yet to come, are partially being based for our
16 future NRC actions, are partially being based on the response
17 of the company to the Stone and Webster recommendations, so
18 that we can best figure out how to utilize our resources most
19 effectively to re-measure how those improvements have taken
20 place.

21 I believe, yes, there has been an ongoing involvement
22 in that assessment activity and there will be. But rather than
23 being able to answer in specifics, we are, at this moment,
24 keeping our options open depending on how the company responds
25 to the Stone and Webster recommendations.

1 CHAIRMAN ZECH: I think the Commission would be
2 interested in learning of those actions and responses on the
3 part of the licensee and your thoughts as regards their
4 actions, too. I believe that happens later this Summer; is
5 that what you said -- in August?

6 MR. B. MARTIN: In August, we'll be getting the
7 company responses.

8 CHAIRMAN ZECH: It might be well to give to the
9 Commission, a brief report at that time of your assessment of
10 that report and also any recommendations that you may have in
11 that regard.

12 MR. MURLEY: Mr. Chairman, I might add that part of
13 our increased attention is going to be some increased team
14 inspections. It may even include a special diagnostic
15 inspection, but we haven't yet decided. As Bob said, we were
16 waiting to see just exactly how their own situation improves.
17 We're virtually certain that there will be more team inspection
18 at the plant.

19 CHAIRMAN ZECH: Good. It's an interesting plant from
20 my standpoint because, having been there some time ago, now I
21 do recall, it does have an excellent operating record. So,
22 it's a tough plant to say -- to determine that they have
23 weaknesses when their operation record is so good.

24 On the other hand, I would think that you are on the
25 right track and should watch it very closely, because if you

1 are concerned about the engineering support which, in my view,
2 could reflect in maintenance or other areas like that, that
3 might not show up in an operational record, I think it's
4 important that you use your best judgment in reviewing that
5 because it's a little bit unique.

6 It doesn't show you a bad track record. On the other
7 hand, you have these concerns and for that particular reason,
8 because it's a little different, I think the Commission would
9 be interested in hearing your thoughts when you hear the Stone
10 and Webster recommendations. All right, thank you very much.
11 Let's proceed, Mr. Stello.

12 MR. STELLO: Region III.

13 MR. MURLEY: Carl Papierello is here. Burt Davis is
14 on leave, so Carl is going to talk about Fermi and Dresden.

15 MR. PAPIERELLO: Fermi 2 is a plant which is going to
16 remain to be a plant that we continue to monitor closely. When
17 we did the recent SALP board on Fermi; basically we found no
18 change in areas of operations, little change in maintenance,
19 slight improvement in surveillance.

20 All areas which received SALP 3 this period and had
21 received SALP 3 the last appraisal period. Engineering and
22 technical support, which was rated for the first time this
23 period, was also given a 3. We think that that particular area
24 provides a root cause for some of the problems in maintenance
25 and the area of quality programs received a 3 with an improving

1 trend.

2 Three reflected the Board's opinion that sufficient
3 progress was not made in improving this plant over the SALP
4 period. They did note that in the second half of the SALP
5 period, Fermi acquired a new QA manager and that there had been
6 a significant, let's say, an improvement in the QA organization
7 as such in the second half of the appraisal period.

8 The plant -- we still see personnel errors in these
9 areas. Some of these personnel errors resulted in significant
10 escalated enforcement action. There have been significant
11 management changes over the last year and half. There are
12 improvement programs in place, including the review of all of
13 the plant procedures -- operations, surveillance, maintenance
14 and administrative, to make sure they're right.

15 Procedures that are incorrect get them into trouble,
16 particularly in the surveillance area. There are programs to
17 upgrade control room performance. Although these programs are
18 in place, even now, we still see operators make errors,
19 particularly when the plant is not operating -- during periods
20 of plant shutdown.

21 All people, operators as well as the other
22 individuals, have had problems complying in using procedures.
23 If you look back -- after we did the SALP, we looked back over
24 the past year and we note that through most of the SALP period,
25 most of the calendar year '87, this plant's operation was

1 restricted and we had controls ongoing about 50 percent and
2 above 75 percent power.

3 They made improvements that allowed us to lift these
4 holds, so, in fact, the performance during parts of '87 was
5 actually poorer than it is currently. The material condition
6 of the plant, we feel, has improved significantly over the past
7 year. The performance indicators, although they show overall
8 poor performance, show a significant improving trend. The
9 trending indicators are all improving significantly.

10 I'd point out that maintenance and quality programs
11 had an improving trend although they were rated 3. Three
12 areas: emergency preparedness, security and notably start-up
13 testing were all rated at 1. They did very well in their
14 start-up testing program.

15 We plan on -- what we plan on doing is a diagnostic
16 team inspection which will be done by AEOD with the assistance
17 from regions and NRR. We plan on shortening the SALP period to
18 9 months. The next SALP period will end on December 31st of
19 this year. We intend to do enhanced region-based team
20 inspections with contractor and NRR assistance, primarily in
21 the areas of engineering and maintenance.

22 We intend to enhance our oversight by holding
23 periodic monthly meetings and looking at objective measures of
24 performance that we and the licensee can agree on and actually
25 measure improved performance. We intend to augment our

1 operations inspections up there by sending region-based and
2 inspectors from other sites to periodically spend a couple
3 weeks at the site.

4 We currently plan to -- top NRC, NRR and regional
5 management plans to meet later this month with the top
6 corporate management.

7 MR. MURLEY: I should add that on this plant, Fermi,
8 we, of course, have been working with the region and team
9 inspections and giving it special oversight these last several
10 months as well. In fact, because we hold points on their
11 progression in power level, we've had to make assessments -- us
12 jointly with the region -- on whether they can increase in
13 power level. Our judgment has been is that they have been
14 slowly, but steadily improving over the last 6 months.

15 There's been at least two specific decisions that
16 we've had to make jointly on whether the power can be increased
17 and that sort of thing. That kind of is our collective
18 judgment and when we met, as Carl said, our collective judgment
19 is that we need to just keep our attention on them some more.

20 CHAIRMAN ZECH: All right, thank you very much.
21 Questions from my fellow Commissioners on this plan? All
22 right, let's proceed please.

23 MR. PAPIERELLO: The other plant I'd like to talk
24 about is Dresden. Dresden remains on the list of plants that
25 we wish to monitor closely. Just a little history to where

1 we're at. We're talking about an old plant that, over the
2 years, the corporation has not given a very high level of
3 attention to. There has been, over the years, an attitude on
4 the part of the plant staff that they were, you know, one of
5 the first people in the business, and we teach other people.

6 There had been a lot of changes in the last year and
7 a half. They've replaced the plant superintendent. They've
8 replaced a significant number of station managers. They've
9 added a corporate management oversight over all of the
10 operating plants. They have set up a special group in the
11 corporate office to over-view the performance of all
12 Commonwealth plants.

13 They are in the process of upgrading maintenance.
14 However, at the time we did the last SALP, which was early this
15 year, they did not have a good preventative maintenance program
16 actually in place and ongoing. This plan has suffered over the
17 years because of age. The material condition of the plant was
18 not very good and there was a lot of equipment failures. The
19 plant had large contaminated areas.

20 We rated the plant as SALP-3, requiring increased
21 attention by both Commonwealth and us. Currently, they are
22 systematically reviewing all the equipment in the plant to
23 determine what kind of preventative maintenance needs to be
24 done. Decontamination is ongoing and they've shown progress.

25 They've upgraded fire protection and housekeeping but

1 it's what I would call in the early stages. Some areas of the
2 plant look very good. But it's still ongoing. They're working
3 to change the attitudes of the plant staff.

4 Performance indicators right now are indicating
5 average performance. Historically, this plant's performance
6 has varied between average to below average. We get them up in
7 the SALP, the number all SALP 2's and then some SALP 3's would
8 start showing up, only to deteriorate again.

9 We plan on maintaining very close attention to this
10 plant until the maintenance and post-maintenance testing and
11 all the components of that -- the interaction with operations,
12 design aspects of plant modifications and corrective
13 maintenance, the engineering work that's associated with
14 maintenance, as well as the actual performance of the
15 maintenance, performance of post-maintenance test and review of
16 those tests are in place and it is shown to be working.

17 Currently, Unit 3 just came out of an outage which
18 was a good outage and both units are operating, but their
19 operation power is limited because we are having problems in
20 the midwest with water temperature. There are several plants
21 that are affected.

22 CHAIRMAN ZECH: Questions from my fellow
23 Commissioners? Mr. Roberts?

24 MR. ROBERTS: Yes. With the overall issue for
25 Braidwood-2; do you think that's going to have any effect on

1 what the utility, how they are going to allocate their
2 resources in relation to the nuclear program?

3 MR. PAPIERELLO: Yes, I have, over the last year in
4 particular -- we have seen Commonwealth reallocate resources
5 toward the operating plants. I guess my view is that the -- is
6 looking back at it, the construction program -- they brought
7 six large units on line in the past five or six years, which
8 required a heavy amount of management attention.

9 I think they developed a lot of good managers in that
10 program and they have not put a lot of that management talent
11 on the operating units.

12 MR. MURLEY: Commissioner, I think there is a common
13 thread in some of these problems that we've seen across the
14 country -- utilities having to focus a lot of their management
15 attention on the new plants, because --

16 COMMISSIONER ROBERTS: Sure, the economic pressure is
17 tremendous.

18 MR. MURLEY: Absolutely. Now that these plants are
19 being finished and coming on line, we should see, I think, more
20 attention placed on the operating units.

21 CHAIRMAN ZECH: I'll just make one comment. I know
22 you've been watching the Dresden plant closely now for some
23 time. It did seem to me though, if I read your analysis
24 properly and if I understand you here today, that in recent
25 months, there has been an improving trend.

1 MR. PAPIERELLO: There has been.

2 CHAIRMAN ZECH: It does look like perhaps their
3 improvement programs are --

4 MR. PAPIERELLO: For about the last 8 months.

5 CHAIRMAN ZECH: For about the last 8 months, it's
6 been improving. All right, fine. I'm sure you'll watch it
7 closely and we'll be interested in watching it continue to
8 improve. Are there any other comments from my fellow
9 Commissioners?

10 All right, let's move along, please.

11 MR. MURLEY: Nelson Grace from Region 2 will talk
12 about Turkey Point.

13 MR. GRACE: As you know, we've been monitoring Turkey
14 Point closely for several years with support and cooperation
15 from headquarters. There have been rays of hope from time to
16 time that things were on the mend, but there was something
17 missing. I think today I can report that they've addressed
18 that problem and have made management changes throughout the
19 organization which we think now causes us to be cautiously
20 optimistic about the future.

21 They've changed managers from the Executive VP level
22 down through Senior VP, the VP for Nuclear Power, the Site VP,
23 the Plant Manager, Operations Manager and several others at
24 that site. What was missing, of course, in the past, was that
25 spark of leadership and I think now we're optimistic --

1 cautiously optimistic.

2 This started last August with the appointment of a
3 new Site VP, who was an ex-Navy Nuke and he immediately
4 initiated the so-called management-on-shift program, which had
5 supervisors from different elements at the site sit in, in the
6 operating room, monitoring performance. This brought out some
7 problems to their attention, not only with respect to
8 discipline in the control room, but also with respect to
9 communication of problems down in the control room through the
10 line organization.

11 More recently, they've brought on a new Senior VP
12 from INPO who is already making a big difference. Most
13 recently, a new plant manager from Grand Gulf who has a very
14 good track record in having turned Grand Gulf around several
15 years ago. So, these management changes have included now, a
16 couple of new people from the outside with a proven track
17 record and we have felt that that's necessary.

18 Every problem plant in the country has found it
19 necessary to bring in some new blood, a new set of eyes without
20 a vested interest in the past. That's showing its effect. The
21 other thing is, they brought down some managers from St. Lucie,
22 which has been a star performer and this too, has made a
23 difference.

24 They had too little cross-fertilization between their
25 good plant and their poor performing plant. The other thing

1 that happened recently was, well, last Fall, the licensee
2 volunteered to bring in a contractor from the outside to review
3 their management structure and interview all the people and try
4 to diagnose their problems. This was the Interncon
5 Corporation and they completed their study -- this was
6 confirmed by an order in November, I believe, from NRC.

7 They completed their study in late April, put out a
8 report and then the NRC team reviewed that report, reviewed how
9 they did their study to make our own assessment as to the
10 adequacy of that study. AEOD led that review with
11 participation from the region and our headquarters people.
12 They've added some concerns to what Intercon had found and now
13 we expect a response from the licensee by August 15th, to the
14 whole package.

15 Now, we're not offering this package to them as the
16 complete prescription for success. Otherwise, why do you need
17 the new management team? It's their judgment that has to be
18 brought to bear and they've told me that they have their own
19 ideas about some other problems that haven't been identified
20 and their report is going to be complete -- not only responding
21 to the contractor's findings, the NRC findings, but also their
22 own judgment, based on their good past experience in
23 recognizing problems and making corrections.

24 So, that's a brief report on FP&L, Turkey Point in
25 particular; and I think in summary again, I should say we're

1 cautiously optimistic. But just like when you put good people
2 together, individually they may be great, but you have to watch
3 the chemistry and see how it works out.

4 CHAIRMAN ZECH: Thank you very much. Questions from
5 my fellow Commissioners? Commissioner Rogers?

6 COMMISSIONER ROGERS: Just one thing -- as I recall,
7 they had a rather extensive quality improvement program in
8 place there that involved everybody in a participatory mode
9 that one might find very interesting, but maybe raise some
10 questions about. What is the status of that? Is that working?
11 Is that --

12 MR. GRACE: It has been working.

13 COMMISSIONER ROGERS: -- as great a preoccupation
14 with them as it seemed to be six months ago?

15 MR. GRACE: It's less of a preoccupation with them.
16 They have employed the Sandalini Corporation to develop a team
17 activity on-site. This has paid off to a limited extent, but
18 what was lacking again, was the corporate involvement, site
19 management involvement -- it was left at lower levels and it
20 didn't all hang together as well as it should have. They no
21 doubt have benefitted from that, but still, there was something
22 missing. I think now with the new management team, they have
23 provided that missing spark.

24 CHAIRMAN ZECH: Other questions? Just one quick
25 observation. We've been following Turkey Point for some time

1 now. I'm pleased to see that you think that they've taken some
2 significant actions. I'm sure we're all pleased to see that.
3 But, frankly, what I think we're looking for is results.

4 We haven't seen many down there for a long time. It
5 seems to me that Turkey Point should show results. If they
6 have taken significant actions that are in the right direction,
7 results should show. So, I hope you will follow that plant
8 very closely.

9 Their improvement programs -- we'll just have to wait
10 and see, but I do think we're looking for results at that
11 plant.

12 MR. GRACE: Yes, indeed.

13 CHAIRMAN ZECH: All right, let's proceed, Mr. Stello.

14 MR. STELLO: Okay, thank you. Bill Russell is on
15 military leave, so Bill Kane is the Director of Reactor
16 Projects from Region 1 and he'll talk about those plants.

17 CHAIRMAN ZECH: Welcome, Bill.

18 MR. KANE: Thank you. First of all, I'd like to talk
19 about Peach Bottom. We have met with the Commission on several
20 occasions, separately and also in these type of meetings to
21 discuss the plant which has been shut down, as you well know,
22 since March 31st of 1987 as a result of a long-standing and
23 pervasive inattentiveness of shift operations.

24 I'd like to discuss some of the recent actions that
25 have taken place since the last meeting. As you probably know,

1 there was a release of an INPO letter earlier this year which
2 was critical of Philadelphia Electric Company management.
3 Following that, there were some significant corporate personnel
4 changes -- a new President and CEO, formerly with Philadelphia
5 Electric Company and Consumers Power Company; a new Executive
6 Vice President of Nuclear, McNeil, who was formerly with Public
7 Service Electric and Gas; a new Plant Manager at Peach Bottom
8 who was formerly the Limerick Plant Manager.

9 As a result of these actions, the entire line of
10 supervision and management from the shift superintendents on up
11 to the President and CEO of the company have been replaced
12 since the shutdown of the Peach Bottom facilities. Future
13 actions that -- some significant future actions that will take
14 place that I'd like to share with you are the licensee, of
15 course, will continue corrective maintenance for Units 2 and 3
16 and that includes a pipe replacement of Unit 3.

17 There will be a review of the licensee's restart plan
18 which has been submitted. We have had several rounds of
19 questions. As you recall, prior to the last Commission
20 meeting, we had terminated our review of that document because
21 it had not directed itself toward the real root causes in our
22 view. As a result, that restart plan had been modified,
23 resubmitted and the latest response to the questions is due in
24 later this month.

25 If they are satisfactory, we could complete our

1 review of that restart plan in August of this year.

2 MR. MURLEY: Excuse me, Bill. Could you move a
3 little closer to the mike? Some people are having trouble.

4 MR. KANE: The Commission has met with --

5 CHAIRMAN ZECH: Is that better everybody? Can you
6 hear him now? Okay, fine, let's go forward.

7 MR. KANE: The Commission has held a number of public
8 meetings throughout the state of Pennsylvania and the state of
9 Maryland, in order to receive public comments on the restart
10 plan. We met, as you recall, to receive comments on the
11 initial plan and we have met again in three separate meetings
12 to receive comments on the revised plan. We have also been
13 receiving comments from the states of Pennsylvania and
14 Maryland.

15 We will be reviewing all of those comments and
16 resolving those that are applicable to the restart of the
17 facility in the coming months. The major activity will also
18 will, of course, be verifying that the corrective actions that
19 they have provided in their restart plan have been in place and
20 are, in fact, working. That will be the subject of the
21 significant inspection activity that will take place in the
22 latter part of this year.

23 The Philadelphia Electric Company schedule for the
24 restart of the first unit is November of 1988. We are also
25 meeting with ACRS and communicating with ACRS in order to

1 determine how they can fit into the program so that they can
2 provide their review prior to our meeting with the Commission.

3 That activity has been ongoing and finally, it
4 appears, based on the schedule as I see it right now, that we
5 could possibly be meeting with the Commission in October of
6 November.

7 Of course, all of this is dependent upon the quality
8 of the revised submittal and our review of the effectiveness of
9 the implementation program. That concludes what I had to say
10 on Peach Bottom.

11 CHAIRMAN ZECH: All right, thank you very much.
12 Questions from my fellow Commissioners on Peach Bottom? It
13 think we're all well aware that you're following Peach Bottom
14 very closely, as is the headquarters staff and the Commission,
15 too.

16 Proceed, Mr. Stello.

17 MR. KANE: I'll next turn to the Pilgrim facility
18 which has been shut down since April of 1986. The Commission
19 was just recently briefed on Pilgrim, I believe, last month.
20 What I would plan to talk about are just simply those things
21 that have happened since that point.

22 We have received and reviewed the SALP assessment and
23 have determined that it is sufficiently complete and
24 satisfactory so that we can conduct an integrated assessment,
25 team inspection, and Monday of this week we sent a letter

1 indicating that would take place. That inspection is scheduled
2 for August of this year.

3 We have also been communicating with the ACRS. There
4 is a meeting this Friday to discuss with them again how to fit
5 their review of the Pilgrim facility into their process prior
6 to the Commission meeting. That is taking place.

7 To give you an assessment, if all goes well, it would
8 appear we would be able to meet with the Commission in
9 September or October of this year to review the readiness of
10 Pilgrim for re-start.

11 CHAIRMAN ZECH: All right. Thank you very much. Any
12 questions from my fellow Commissioners?

13 [No response.]

14 MR. KANE: Now we go to Nine Mile Point 1, which Dr.
15 Murley indicated earlier is a new plant for discussion by the
16 Commission in this forum. Nine Mile Point 1, I might go back
17 and review with you some of the reasons. Earlier this year we
18 completed a SALP report which concluded that the performance of
19 the facility had not significantly improved since the prior
20 assessment period. In the prior assessment period, we raised a
21 number of concerns about the quality of communications and
22 coordination within the organization, its ability to diagnose
23 and assess problems, develop corrective actions and implement
24 them effectively. That message I think was given very strongly
25 to them in a SALP report and one cycle later, we did not see

1 the significant improvement that we were looking for.

2 The plant has been shut down since December of last
3 year due to a feedwater transient but following that time,
4 there have been continuing instances of poor corrective action
5 and lack of management involvement in resolving issues. These
6 are rather broad issues. Some of them are operator
7 requalification. The quality and use of the emergency
8 operating procedures, fire barriers and in-service inspection
9 findings.

10 Prior to the SALP management meeting in March of this
11 year, the Regional Administrator and I met with their senior
12 management to convey to them our concerns with this continuing
13 poor performance in our view. The SALP management meeting was
14 conducted on May 10th of this year and communicated these
15 concerns.

16 The principal areas of concern in the SALP report,
17 the area primarily of assurance of quality which is again the
18 ability of an organization to develop and identify problems,
19 correct them and implement successful solutions, the
20 radiological controls area and the licensing areas were weak
21 and we noted a significant contrast between the operations area
22 between Units 1 and 2.

23 Some future actions that are taking place, there will
24 be a senior management review at the site near the end of this
25 month to convey to the licensee, to assure that the licensee

1 and their operating staff clearly understand the basis for our
2 concerns.

3 We plan to issue a confirmatory action letter which
4 will lay out in detail those particular areas that must be
5 resolved to our satisfaction before the re-start of Unit 1 and
6 that will entail the submittal of a re-start action plan by the
7 facility, by the licensee, to ensure that it understands and
8 has developed positive corrective actions for the matters that
9 are the source of our concern.

10 Following that, there will be a need to review and
11 approve that action plan and then a readiness inspection team
12 will go to the site to review the implementation of that plan
13 and ensure to our satisfaction that the plant is ready for re-
14 start.

15 Thank you.

16 CHAIRMAN ZECH: Any questions from my fellow
17 Commissioners?

18 COMMISSIONER ROGERS: Just a question of whether the
19 last SALP ratings show the kind of concerns that you have. I
20 am under the impression and maybe my data isn't accurate, but
21 the SALP ratings for Nine Mile Point 1 that you pick up from
22 CYNET seemed to give pretty good ratings, 7-1's, 1-2 and 0-3's.
23 The trends were bad.

24 MR. KANE: I don't think --

25 COMMISSIONER ROGERS: You don't think those numbers

1 are correct?

2 MR. KANE: The operations area was category 2 for
3 Units 1 and 2. They don't sound like the right numbers.

4 MR. MURLEY: Commissioner, I think you are correct
5 that in earlier SALP's, going back to 1985 perhaps, Nine Mile
6 Point 1 did get good SALP scores in general. I was in the
7 Region at the time, and speaking for myself, I think the scores
8 were too high, as a matter of fact. What we are seeing is more
9 analysis. I don't know that they dropped in their performance
10 so much as our analysis got keener.

11 COMMISSIONER ROGERS: It was just a question of
12 whether we have the public documentation that tends to support
13 it.

14 MR. MURLEY: The more recent SALPs I am quite
15 confident do not show --

16 COMMISSIONER ROGERS: Is the most recent SALP in
17 CYNET?

18 MR. KANE: I really don't know.

19 COMMISSIONER ROGERS: What is the date?

20 MR. KANE: It should be March of this year. We will
21 check to see if the March data is now in after the meeting.

22 COMMISSIONER ROGERS: Thank you.

23 CHAIRMAN ZECH: It seems to me that Nine Mile 1 or
24 maybe 2, maybe both, had a pretty good steaming record there
25 for some time, they had quite a long run. Is that the right

1 plan?

2 MR. KANE: Yes, sir. That's Unit 1, for 400 plus
3 days. One of the difficulties perhaps in seeing the kinds of
4 things we are seeing subsequent to the SALP period in that long
5 period successful run would perhaps match some of the things we
6 are seeing now.

7 MR. STELLO: Mr. Chairman, one of the things that
8 became clear to me, if you will remember, during construction,
9 the considerable difficulty both in terms of some technical
10 problems and economic problems, just about the full management
11 attention had been diverted away from the operating plant. I
12 think this is a point Commissioner Roberts stated earlier. I
13 think it is clear that this kind of situation develops there,
14 too.

15 [Commissioner Roberts left the hearing room at 2:10
16 p.m.]

17 CHAIRMAN ZECH: I was going to make a similar
18 comment. I do recall that. I think that is understandable to
19 a degree, to folks in the Unit 2 plant, trying to get it on
20 line, especially when Unit 1 was operating apparently so well.
21 I guess my only concern about that kind of a situation is when
22 a plant operates for a long record like that, I think the
23 utility must guard against the tendency of turning that plant
24 into what I call a steamer, just steam it, let it run, don't
25 worry too much about it because everything is going fine.

1 That's not the way it ought to be in my judgment. It's fine
2 for a plant to make a long run, we like the plant to do that.
3 They ordinarily are designed to do that and run well. On the
4 other hand, that doesn't mean maintenance should not be done,
5 planned, outages should not be planned or preventive
6 maintenance should be thought about, testing and surveillance
7 shouldn't be done very carefully.

8 I think we should guard against turning a plant into
9 a steamer and perhaps that was the case here. I don't know for
10 sure. It seems to me that when one would focus all their
11 attention on the unit coming on line, perhaps more attention
12 might have been given to Unit 1 during that long run period and
13 recognizing that maintenance and other areas should have been
14 looked into.

15 I would submit that what you have told us here about
16 the Nine Mile Point situation is something that does indeed
17 merit continued close attention and I'm sure that is what you
18 intend to give it.

19 Let's proceed.

20 MR. MURLEY: Jim Partlow from Special Projects will
21 talk about TVA.

22 MR. PARTLOW: Before specifically reporting on the
23 Sequoyah and Browns Ferry sites, let me give a short report on
24 TVA, organization, management and resources.

25 [Commissioner Roberts returned to the hearing room at

1 2:13 p.m.]

2 MR. PARTLOW: As the Commission will recall, they
3 were briefed by top TVA management on June 21st in which they
4 described their plans for reorganization. That reorganization
5 was approved by NRC and technical specifications modified, and
6 that organization went into effect on the first of July.

7 In terms of top management changes, the one thing I
8 wanted to report in terms of the operations of TVA facilities
9 is that we understand recently that the Site Director at the
10 Sequoyah site plans to retire shortly and so TVA needs to
11 address that matter of who will be the number one manager at
12 the Sequoyah site.

13 In terms of TVA resources, during our meeting,
14 NRC/management meeting and as Chairman Runyon had indicated to
15 you, they did announce the budget cut-backs and so forth.
16 There is some 20 percent cut-back in the total number of
17 people, contractor and employees devoted to the nuclear power
18 group.

19 We and SP are looking at those on a site by site
20 basis and on a commitment by commitment basis. In other words,
21 there is work that needs to be done for re-start, there are
22 commitments to be met and we hope to ensure those things will
23 be accomplished before re-start.

24 Specifically, in terms of the sites, first Sequoyah
25 2, which the NRC/management meeting characterized as a plant

1 which has been allowed to start up but requires continued
2 monitoring. Again, Mr. White briefed you on the early
3 operations of that plant, a chief criticality on May 13th.
4 They had the first three weeks in which they had difficulty
5 with the feedwater control system and suffered some five trips
6 during that period.

7 We have asked TVA to come in for a management meeting
8 in mid-June. They described to us their corrective actions in
9 terms of working on secondary plant maintenance, adding an
10 extra operator in the control room during start-ups and so
11 forth.

12 We concurred in their re-start on June 19th and since
13 then, for the past three and a half weeks, they have been
14 operating in a stable condition and satisfactorily at 70
15 percent power.

16 Sequoyah Unit 1, the management meeting left them in
17 the status of meeting NRC approval prior to re-start. The TVA
18 schedule there is to begin non-nuclear heat up and mode change
19 the first week in September. That will translate into, if
20 things go right with them and with us, with their being ready
21 for criticality in early to mid-October.

22 Over the months, Special Projects in working with
23 TVA, we have always wanted to ensure that each of us
24 understands the criteria of the technical issues necessary for
25 start-up and at Sequoyah 1, we don't have any differences

1 there. It is largely a matter of implementation of our
2 confirmatory inspections and so forth to find them ready. They
3 do still owe us some information on their re-review and re-
4 calculation of electrical design criteria but we don't expect
5 to have any surprises in that.

6 They still have some work to do, getting the ice
7 condenser ready, system alignments, testing and working down
8 their maintenance list to a good level that we will look at to
9 ensure that it is ready for start-up.

10 Browns Ferry Unit 2, the schedule there with TVA is
11 to load fuel early September and to be ready for criticality in
12 Unit 2 some four to six months later which would translate into
13 the January/March 1989 timeframe.

14 The EDO will convene another NRC/senior management
15 meeting prior to that start-up and we will have more
16 information for you at that time.

17 There is a lot of work to do there yet. They are
18 still in some areas in the process of defining their problems,
19 developing corrective action programs and conducting
20 implementation.

21 This schedule is optimistic. If everything goes
22 right, maybe they can meet it. There is a lot of work to do.
23 We still have to determine some major inspection attempts into
24 those facilities. They are not ready for us. They will be
25 shortly, to do such things as the environmental qualification

1 inspection, the Appendix R safe shutdown inspection and so
2 forth.

3 CHAIRMAN ZECH: Thank you very much. Questions from
4 my fellow Commissioners?

5 [No response.]

6 MR. STELLO: Mr. Chairman, with your permission,
7 while it wasn't originally on the agenda, I'd like to talk
8 about LaSalle and at least give you a brief status of it and
9 then have Dr. Murley give you some concluding remarks and then
10 any questions you have.

11 CHAIRMAN ZECH: Fine. Proceed.

12 MR. MURLEY: What I thought I'd do is summarize for
13 you the actions that the staff has taken with regard to the
14 LaSalle power oscillations that we saw in March. We sent out
15 an augmented inspection team, actually led by the Region with
16 NRR participation, to determine the facts of the event. That
17 report has been out for some time and it is quite
18 comprehensive. NRR and AEOD separately analyzed the issue. We
19 have put out an information notice and a bulletin on June 15th,
20 1988. We required special improvements at the LaSalle plant
21 themselves by way of procedures and training, before they were
22 allowed to re-start.

23 In addition, we have met with the BWR Owners Group to
24 decide what additional analysis is needed of this phenomenon.

25 Future actions, we have asked the Office of Research

1 for assistance in analyzing asymmetric oscillations and in
2 analyzing what implications this kind of oscillatory behavior
3 could have on ATWS.

4 We met with the BWR Owners Group and they are
5 evaluating further what instrument response is necessary and
6 whether it is adequate and whether any operating procedures
7 need to be modified.

8 We are preparing an inspection procedure for the
9 Regions to follow up on the bulletin when the utilities come in
10 with their plans.

11 Finally, we are considering what tech spec
12 improvements if any are needed for this situation.

13 We think we have taken light actions. We have got
14 quite a comprehensive program underway.

15 CHAIRMAN ZECH: The Commission, as you know, has also
16 asked the ACRS to review the LaSalle situation. I hope you
17 will be working with them. We will be anxious to hear their
18 report as well as the staff's report.

19 MR. MURLEY: Yes, we will be working with ACRS.

20 CHAIRMAN ZECH: Thank you. Any questions from my
21 fellow Commissioners?

22 COMMISSIONER ROGERS: On this question of asymmetric
23 oscillations, is that the most dangerous or less dangerous
24 situation? Isn't it the symmetric oscillations that are not
25 apparently obvious with respect to your neutron fluxes that may

1 be something more to worry about in the long run in a certain
2 sense because they are harder to detect than the asymmetric
3 oscillations? Or do I have it the wrong way?

4 MR. MURLEY: I think it is just the opposite. When
5 the entire core which is generally loosely coupled
6 neutronically, when it oscillates as a whole, then we think we
7 are protected by the scram system. In this case, it was. When
8 the entire flux, the average flux level reached 118 percent,
9 the rods went in and the reactor scrambled.

10 The concern with asymmetric oscillations is that one
11 part of the core can be decreasing while another part is
12 increasing. When that happens, the average --

13 COMMISSIONER ROGERS: Is unchanged.

14 MR. MURLEY: That's right. One can get almost 200
15 percent. That's the situation we are looking at.

16 COMMISSIONER CARR: It seems to me that we ought to
17 have some operator procedure changes because it seems to me
18 they waited an awfully long time to scram the plant. I
19 understand they were following their procedures but we still
20 need to take a look at those procedures.

21 MR. MURLEY: LaSalle was atypical in that sense
22 because their analysis, their licensing analysis showed that
23 the predicted oscillations would diminish and it turned out
24 that they didn't. Because of those predictions, which we had
25 reviewed, nonetheless, they felt they did not need to have

1 special procedures to trip the plant.

2 Other plants have in them procedures that would
3 generally require them to trip and in fact when we looked
4 through operating experience, we have seen several cases where
5 the operators have tripped the plant.

6 COMMISSIONER CARR: I think I would class it in basic
7 operator training in that kind of a situation where you don't
8 understand what is going on, the safest thing to do is to shut
9 down.

10 MR. PARTLOW: In this case, the plant tripped
11 automatically on neutron flux but the operator was about to
12 punch it out.

13 COMMISSIONER CARR: He waited it out longer than I
14 would.

15 CHAIRMAN ZECH: It brings one to conclude should
16 there be procedure changes?

17 MR. MURLEY: That is what we are looking at; yes.

18 CHAIRMAN ZECH: If you conclude there should be, I
19 would submit we should get it out as soon as you have made that
20 conclusion for sure. In other words, if it looks like we
21 should emphasize training or emphasize a procedural change or
22 make a procedural change, we should do that promptly.

23 MR. MURLEY: We have done it at LaSalle.

24 CHAIRMAN ZECH: I know you have done it at LaSalle.

25 COMMISSIONER CARR: You did alert the operators to

1 the problem.

2 MR. MURLEY: The bulletin requires each licensee to
3 review their procedures and their training and to take the
4 appropriate action. We are waiting to see what they reply to
5 us on that. We expect they will do that.

6 CHAIRMAN ZECH: All right. Any other questions?

7 [No response.]

8 CHAIRMAN ZECH: Let's proceed.

9 MR. STELLO: Tom, why don't you just give a brief
10 overview and we will go on.

11 MR. MURLEY: That concludes our discussion of the
12 specific plants. I would like to reiterate that overall
13 throughout the United States, we see improving trends in
14 performance, operating performance.

15 Ed Jordan briefed you in April where he showed trends
16 of fewer automatic scrams, fewer safety system actuations,
17 fewer significant events. I mentioned there are fewer accident
18 precursor events. There are also fewer serious daily reports.
19 The staff is confident that these regular NRC/management
20 reviews that we do are contributing importantly to these
21 improving trends in performance.

22 That concludes our discussion on reactors.

23 CHAIRMAN ZECH: Thank you very much.

24 MR. STELLO: If you will allow us 30 seconds to do
25 some rearranging.

1 CHAIRMAN ZECH: All right. You have 30 seconds.

2 MR. STELLO: Again following generally the same
3 format we'll have Hugh Thompson giving a broad overview and
4 then discuss some specifics.

5 CHAIRMAN ZECH: All right. We have got 15 more
6 seconds. We'll go ahead and start now unless you want to wait.

7 MR. THOMPSON: Joining me, Mr. Chairman, is Bill
8 Russell's other right hand -- Glenn Slojblom, who is the Acting
9 Division Director of Radiation Safety and Safeguards. Glenn is
10 on my staff but he is up at the region for a rotational
11 assignment while some of the Region 1 managers are down here,
12 so it is an opportunity for me to help Bill Russell out and get
13 some action in that direction.

14 We likewise identified with the regional assistants,
15 in particular licensees that warrant single management
16 attentions. I would note that since we do have 8,000
17 licensees, we didn't have quite the systematic program that NRR
18 was able to do and so we looked at those licensees which had a
19 broad implication, multiple region importance, ones that were
20 important from a Commission viewpoint and from a programmatic
21 viewpoint.

22 We are making efforts as you know to develop a system
23 to have some performance evaluation factors. Region 3 has gone
24 a long way to establishing the foundation or framework for that
25 program. We are working with the other regions. Probably

1 beginning around the first of September, each of the regions
2 will be implementing part of a performance evaluation program
3 for fuel cycle material licensees and their regions.

4 We identified essentially two groupings of the NMSS
5 licensees that we want to discuss with the Commission today.
6 If I can have the first slide.

7 [Slide.]

8 You'll note some of what I would classify as
9 facilities for which the licensee action, the licensee's
10 corrective actions have not been fully identified and agreed to
11 by NRC or ones that require particular generic implications for
12 follow-up activities. These include the 3-M Company, which you
13 are very familiar with, the Safety Light Corporation, which is
14 one I can tell you has received a significant amount of
15 attention by senior management at Region 1 and Combustion
16 Engineering. These are like the regional administrators or
17 their designee to discuss with the Commission.

18 I will speak briefly on Finlay and the follow-up we
19 have on those and then go to some of the other facilities that
20 we discussed.

21 If we could talk with 3-M, which turned out to be a
22 very important one from generic aspects, if that's a licensee
23 that we normally would expect to spend about 100 man-hours on
24 inspection and licensing activities and NRC has spent over 6
25 man-years on it with another 7 or 8 man-years spent of our

1 agreement states in following up of the event which you know we
2 had. So, call if you want to and brief us on where we are on
3 3-M and the recent inspection your people did.

4 MR. PAPIERELLO: The current status of 3-M is the
5 licensee owes us a response to the "show cause" order that was
6 issued on February 18th. That is due on July 18th. All
7 devices that were in critical industries -- food, beverages and
8 cosmetic -- have been returned to 3-M.

9 For other industries, most have been returned. We
10 have granted some relief in some cases where the licensee did
11 not have an alternative, replacements were not immediately
12 available and where there was some kind of industrial
13 hazard -- explosive atmospheres, inflammable liquids and the
14 like.

15 What we have done is basically when we have issued
16 exceptions we have basically made them do the things we would
17 make a specific licensee do -- essentially that either for a
18 contractor or themselves they would need survey instruments,
19 they would need to do fairly frequent surveys of the device,
20 frequent leak tests to make sure the device was not leaking.

21 We issued our inspection report on July 1st after
22 headquarters reviewed it. The enforcement on violations will
23 await the OI report. I'll get into that a little later.

24 The significant results I think is that 4% of all of
25 the returned devices leaked. Two percent of them -- half of

1 the leaking devices leaked in excess of the limit of .005
2 microcuries. I think we need to contrast this with the results
3 reported to us on July of 1987, where we got an annual report
4 which showed roughly 12 leaking devices over .005 microcuries
5 or .03 percent of the devices returned. You have to understand
6 the way this system works is that devices are not sold, they
7 are leased. The lease runs for a year and essentially are not
8 very usable after a year because of the half-life on polonium
9 210 and then they'd come in and 3-M sends another device and
10 then are leak tested when they are returned. So we are talking
11 about roughly the same numbers of devices.

12 We conducted an inspection recently of other
13 distribution programs. They manufacture other devices that are
14 distributed to specific licensees. In one case they distribute
15 static meters -- not eliminators but the meters which measure
16 the static charge, use a tritium source, that goes to general
17 licensee but the other ones -- seeds, iodine-125 seeds and
18 cesium-137 -- are distributed to specific licensees.

19 The sources for the devices that use tritium are
20 procured. They don't make those sources.

21 There have been no reported problems with these
22 meters but it is not a return program that you have. You don't
23 have a check by 3-M.

24 Of the cesium sources that are used for medical
25 implants, out of several thousand that have been distributed,

1 only one leaked. That was in February of this year and that
2 apparently was traced to a bad weld in the source.

3 There were three leaking iodine-125 seeds out of a
4 total distribution of almost 9,000. Now they distribute two
5 different kinds of seeds. There is a high activity seed, of
6 which they distributed 115. The three leakers were in that
7 group and they are re-used and it looks like the problem comes
8 from the re-use. Extracting them from a source holder after
9 they're used is tricky and if they are crushed in the process
10 they're damaged so it looks like the re-use is what damaged
11 them.

12 The low activity seeds, of which there were 8,500,
13 there were no leakers. We did find errors in the leak testing
14 procedures they used but there was no evidence of them
15 distributing anything that leaked -- in other words, the
16 calibrations, the way they calibrated instruments was wrong but
17 if you looked at the raw data and you used the right factors
18 there wasn't any leaking devices.

19 Let me answer two questions from the report. Why are
20 we getting that problem with the device? Well, I think the
21 research is showing that there's flaws in the device itself.
22 In other words, microsphere affixed with an epoxy to a surface,
23 you basically have a sphere that's only partially embedded in
24 the glue. You can't completely embed it or you won't get any
25 alpha activity up and mechanically that's not a very strong

1 device so that the device is fundamentally not as good as it
2 ought to be.

3 Secondly, there were a whole set of procedures which
4 had accepted to prevent this device from being used in an
5 unacceptable environment. There was supposed to be controls to
6 ensure that the device if it did fail in a bad environment was
7 caught and there was follow-up on it and this didn't happen.
8 The static analysts who are a combination of environmental
9 evaluators and salesmen just didn't always do their job, didn't
10 go out and evaluate the environment. In some cases, when
11 devices were identified as leaking the licensee -- the general
12 licensee -- was contacted to find out what kind of environment
13 it was in but in a lot of cases that wasn't done.

14 Lastly, even the method of leak testing on the return
15 was poor, so some leakers weren't detected and then the other
16 question is there were a lot more leakers than they told us
17 about and precisely why that wasn't reported to us is under
18 investigation.

19 For the other part of the program, the organization
20 that manages -- it turns out the matrix organization, there is
21 a medical department that makes one kind of source. There is a
22 different department that makes a different kind of a source,
23 even though they are all made in the same factory and the
24 degree of quality assurance in the different areas is a
25 function of which department things are made over and there is

1 no overall corporate overview or audit program of the nuclear
2 program.

3 CHAIRMAN ZECH: Do we have any knowledge that there
4 was any harm to the public as a result of this?

5 MR. PAPIERELLO: No. No indication that anybody took
6 in any of this material -- and it would have to be ingested to
7 be a hazard.

8 CHAIRMAN ZECH: All right.

9 MR. PAPIERELLO: And the areas that are contaminated
10 as known are cleaned up, so a few more come back and if they
11 find leakers they've got to send somebody out to survey and
12 clean up.

13 CHAIRMAN ZECH: And the investigation continues?

14 MR. PAPIERELLO: And the investigation continues.

15 CHAIRMAN ZECH: Any questions?

16 MR. THOMPSON: Mr. Chairman, we do expect a response
17 on July 18th, and on the greatest one they've got an extension
18 because they wanted to do additional evaluation --

19 CHAIRMAN ZECH: Right.

20 MR. THOMPSON: -- of these devices. We are
21 initiating a preliminary lessons learned, you know, some of the
22 items that Carl just discussed are ones I think we can know
23 now, as well as our ability to respond to these types of
24 events. We are looking at our interface with the agreement
25 states, their state programs with the regions, because it had a

1 fairly significant impact on our programs so we are trying to
2 make sure we are acutely aware as early as we can of the
3 lessons learned and we'll be preparing that probably in
4 September. Obviously we'll be back to the Commission on this
5 particular one, this particular licensee.

6 CHAIRMAN ZECH: Very important initiative. I hope we
7 will learn all the lessons we can from this one. It is a good
8 example, so let's make sure we do that -- and a good lessons
9 learned review.

10 MR. THOMPSON: It will probably be at least in two
11 stages. Obviously we'll have to -- you know, once they do the
12 whole product and their review and 3-M's response, we'll
13 probably have to have some additional follow-up with 3-M itself
14 but we are just doing the lessons learned on our own for right
15 now.

16 CHAIRMAN ZECH: That's fine.

17 MR. THOMPSON: The next two licensees are Region 1
18 licensees. Safety Light Corporation is a facility that has
19 been in the radiation business well before the Atomic Energy
20 Commission. It presents kind of a generic problem that I will
21 touch on in some of the other facilities that are not in this
22 particular list but it deals with the clean-up, the financial
23 assurance of clean-up activities and the fact that the
24 Commission may well find itself facing a number of these type
25 facilities over the coming years.

1 You know, the Commission has approved the
2 decommissioning rule, which goes into effect in about two
3 weeks, which will put in place for a certain category of
4 licensees a regulatory framework where the new licensees we'll
5 have to have some financial assurance before they start into
6 business. There's this framework where existing licensees have
7 about a two year period before the rule and before they have to
8 respond with a financial assurance plan, so we still have a
9 number of these to look at and likewise, Combustion
10 Engineering, which was a facility that's had some declining
11 performance that we wanted to highlight for your attention.

12 Glenn?

13 MR. SLOJBLOM: Yes, if I could have my first -- the
14 35 mm slide please.

15 [Slide.]

16 The site we're calling Safety Light is in a little
17 town called Bloomsburg, Pennsylvania.

18 CHAIRMAN ZECH: I can't see much of that thing. I
19 don't know about anybody else, but I can't see much of it.

20 MR. SLOJBLOM: Let me just try to use the arrow.

21 CHAIRMAN ZECH: Tell us what we are supposed to see
22 up there, will you?

23 MR. SLOJBLOM: Along this line up here is the flood
24 plain of the Susquehanna River, which would be right at the top
25 of the viewgraph. The site then extends back and includes a

1 number of buildings. The original initiation of work here
2 started in 1948 by the U.S. Radium Corporation primarily
3 involving radium. That went on in a building that had been
4 used as a toy factory during the war, which is basically right
5 here.

6 They also used strontium and cesium and then tritium
7 for exit signs, a radioluminescent device wherein the tritium
8 excites a phosphor which creates a green or other colored
9 light.

10 At the present time, the facility has got just the
11 tritium operation in this facility here, so from a today's
12 operations point of view we are concerned primarily with this
13 operation here. But over the years after 1948 there was
14 various operations involving painting of dials and watch faces
15 and creation of other sources such as Navy deck-markers.

16 The operation was conducted in a way which resulted
17 in waste sometimes being just taken out of the building and
18 literally disposed of in pits.

19 Here is a pit where material which is dumped right
20 out at the end of the building. There is an old canal that ran
21 parallel to the river. Currently there are two lagoons, one
22 about here and one about here, and they are also contaminated.

23 The most significant disposals occurred in two 10
24 foot diameter, 15 foot deep caissons in the ground, one of
25 which we understand had no bottom.

1 There is a monitoring program that is going on
2 wherein soil samples and water samples are taken and there is
3 from these locations a plume of strontium and tritium basically
4 that is heading off toward the river and that is a monitored
5 situation.

6 We became concerned about this when we learned that
7 the ownership of these buildings was a rather complicated
8 matter. The Safety Light Corporation owns the building they
9 use for the tritium operation plus some of the other buildings
10 that are in this black line and they lease part of those spaces
11 to other companies.

12 If you look at the second slide in your packet here,
13 you will see USR Industries up here at the top and that was a
14 parent kind of an organization. The company now operating the
15 radionuclide operations is the Safety Light Corporation in the
16 tritium facility. All the land that is contaminated is owed by
17 the Metreal Corporation, so with this information the region
18 became somewhat concerned that these various corporate entities
19 were putting the contaminated facilities requiring cleanup in
20 one corporation and the profit center in another.

21 Turn to the next slide.

22 The current problem then is that we have no
23 decontamination underway and we have in correspondence recently
24 with this licensee learned in writing that he has no plans for
25 any near term decontamination. He is committed and he has said

1 he is committed under the license to do that but he has not
2 enough funds. It is a fairly small company. He says he does
3 not have the tens of millions of dollars needed to clean this
4 up.

5 MR. THOMPSON: I think to be clear, I think in the
6 correspondence, he really hasn't made any commitments to clean
7 up, even for the long term. The record right now doesn't
8 reflect that. At the senior management meeting we had, it
9 reflected no effort on his part to clean up the site.

10 CHAIRMAN ZECH: You are going to tell us what we are
11 going to do about it, aren't you?

12 MR. SLOJBLOM: Yes, sir. In addition, we are
13 concerned that they really didn't obtain NRC approval of this
14 transfer of ownership. In other words, the USR Corporation at
15 the top seemed to have divested itself not only of Safety Lite
16 but also of the obligation to clean up. That's not clear that
17 they can actually get away with that.

18 COMMISSIONER CARR: Who owns the license right now,
19 USR?

20 MR. SLOJBLOM: No, Safety Lite Corporation.

21 COMMISSIONER CARR: We licensed them?

22 MR. SLOJBLOM: We authorized a name change which was
23 portrayed as that a number of years ago and then they sold, USR
24 sold it to some other people.

25 MR. THOMPSON: It is not real clear precisely who the

1 "stuckee" is on this one. There may be some changes that were
2 not appropriately approved and we are going to get to the
3 bottom of who should be the licensee in this particular case.

4 MR. SLOJBLOM: In addition we had an issue, the
5 problem of storage of waste for a number of years without a
6 disposal going on and there was a limit placed on their license
7 on how much waste they could have and we were concerned they
8 were going to exceed that limit.

9 CHAIRMAN ZECH: What kind of a health hazard or
10 public safety hazard are we talking about?

11 MR. SLOJBLOM: Basically, in terms of the material
12 that is in contamination, we are talking early low levels of
13 direct radiation, less than one millirem per hour anywhere
14 outside any building. However, what we have here is a long
15 term problem where we have groundwater that has these
16 radionuclides in it. We have soil that is contaminated and if
17 this facility should ever be completely removed here and the
18 real estate sold, then you could contemplate that houses might
19 be built there. We would not want to ever have that.

20 CHAIRMAN ZECH: In the meantime, can we confine the
21 problem?

22 MR. SLOJBLOM: Yes. It is within the property at
23 this point. There was one place at a nearby home where there
24 was some material. That was removed back to the site. There
25 is some monitoring wells there that indicate some of these

1 plumes are traveling towards the off-site properties and that
2 is continuing to be monitored. The operational aspect of this
3 is fairly well controlled.

4 CHAIRMAN ZECH: How significant is the water problem?

5 MR. SLOJBLOM: To give you an idea on tritium, for
6 example, which is one of the main constituents in the water, we
7 have an EPA drinking water limit that is equivalent to four
8 millirem in a year. It is a concentration but that
9 concentration is roughly equivalent to four millirem in a year.

10 In the on-site wells, they do exceed the EPA drinking
11 water limit for tritium. In off-site wells, we have not gotten
12 above about 10 percent of the EPA drinking water limits.

13 In terms of a significant problem, we just do not
14 have that at this point.

15 COMMISSIONER CARR: There is no indication it is
16 migrating to the river?

17 MR. SLOJBLOM: It is migrating toward the river; yes,
18 sir, especially from the two ten foot diameter pipes that I
19 mentioned. There are three monitoring wells that go toward the
20 river from that point and strontium in that particular place is
21 traversing towards the river. We don't believe it is a problem
22 in terms of creating concentrations in the river which would
23 cause any immediate problem but again, it is a long term
24 concern that if this property ever became public that it would
25 not be an acceptable thing to have.

1 We do want to get it cleaned up. Our objective is to
2 get this problem cleaned up.

3 MR. PARLER: Does the Commonwealth of Pennsylvania
4 know about the problem?

5 MR. SLOJBLOM: Yes, they do.

6 MR. PARLER: Does EPA know about the problem, because
7 of potential Superfund implications?

8 MR. SLOJBLOM: We believe they know about this site;
9 yes, sir.

10 MR. PARLER: Either they do or they don't.

11 MR. SLOJBLOM: We have been consulting with both
12 entities and our plan is to continue to do that. I might point
13 out that radionuclide radium is not under NRC's control.

14 MR. PARLER: That was my next question.

15 MR. SLOJBLOM: The Commonwealth of Pennsylvania is
16 well aware of that, has been there, and they are being
17 consulted as we go along.

18 MR. PARLER: How about the tritium, strontium, et
19 cetera, that they used starting in 1948, I think, by-product
20 material that is under our responsibilities?

21 MR. SLOJBLOM: Yes. They were operating under a
22 license all that time.

23 MR. PARLER: Are there other places like this around
24 the country?

25 MR. SLOJBLOM: I believe Mr. Thompson indicated that

1 yes, this would be a problem and that we probably will have to
2 spend more time on, to clean up some of these old places.

3 MR. THOMPSON: Two things we have done, Mr. Chairman,
4 particularly with respect to Safety Lite, while we owe the EDO
5 an action plan Tuesday of next week, to identify the interfaces
6 and actions we plan to take to address this particular problem.

7 MR. SLOJBLOM: If I could have the next slide, it has
8 some of the elements of that plan on it.

9 MR. THOMPSON: In the broader context, we are working
10 to survey all the Regions to find out all facilities that fall
11 into the situation or contaminated sites that are beyond our
12 release limits. We have some which are in the process of
13 decontamination and decommissioning. There are some sites that
14 the license has been terminated and regulations have changed
15 since the terminations and they probably have been released
16 with radiation levels higher than we would release today.

17 CHAIRMAN ZECH: Are we confident we know of all those
18 problem sites?

19 MR. THOMPSON: I am conducting a survey through the
20 Regions right now and I will have that information shortly.

21 CHAIRMAN ZECH: I think it is important that we get
22 it.

23 MR. STELLO: This problem is not unique.

24 CHAIRMAN ZECH: General counsel, do you have another
25 question or comment?

1 MR. PARLER: I thought that several years ago there
2 was some provision requiring licensees such as this to give the
3 Commission notice prior to their termination. I also thought
4 there was some regulatory policy being worked on to provide
5 separate, apart from decommissioning for on-site clean-up
6 assurance of some kind, quite similar to the provision in the
7 regulations for on-site clean-up for nuclear power reactors
8 after the Three Mile Island accident.

9 MR. STELLO: I think the answer to all those
10 questions is yes. We have it in our regulations they are to
11 notify us. In this case, they have. There have been some
12 other cases that they haven't notified us. The problem turns
13 out even when we are notified, they don't have sufficient
14 resources because the rule where we require funding to be
15 available for decommissioning goes into effect in two weeks.
16 It will be several years before we can implement it on some of
17 these.

18 MR. PARLER: Is my understanding correct that we are
19 talking about licensees or former licensees whose activities
20 are strictly in the commercial area and we are not talking
21 about those who might have done work for DOE or predecessor
22 agencies?

23 MR. STELLO: I need to check but my recollection is
24 that I think we have examples of both.

25 MR. PARTLOW: Both and sometimes you have a mixed

1 situation where things were done at different times for
2 different people or one end of the factory did one thing and
3 the other end of the factory did something else.

4 MR. PARLER: Within the last several weeks, I believe
5 there was a General Accounting Office report that has come out
6 about the magnitude of a DOE problem in areas such as this. I
7 would assume if there is an overlapping in facilities of this
8 type, somebody will consider that.

9 MR. PARTLOW: In that case, there has been. Sites we
10 have had in Region III have now been taken over by DOE.

11 CHAIRMAN ZECH: Very well.

12 [Slide.]

13 MR. SLOJBLUM: If I could go back to the slide we
14 had, our plan basically was that we will have it more detailed
15 for the EDO next week. Basically it is to more thoroughly
16 understand the relationships among these various corporate
17 entities so we know who to go to in terms of assigning
18 responsibility for the clean-up. We have two letters and we
19 are getting a third letter from the Metrial Corporation which
20 did not respond yet to our earlier request. We will be trying
21 to sort out what the various entities are saying relative to
22 their responsibilities.

23 MR. PARLER: It may well be what they believe their
24 responsibility is isn't controlling, for example, under
25 Superfund law as amended, class orders or formal orders, et

1 cetera, may under the law be jointly and severally liable
2 regardless of the corporate changes or transfers that might
3 have taken place. Under the law, they will not be able to
4 escape liability. If transfers are made in the past without
5 our approval, there is a provision that requires this Agency to
6 approve licenses before they are transferred.

7 CHAIRMAN ZECH: Thank you.

8 MR. SLOJBLOM: I'm aware of the Superfund authority
9 there, that should this licensee not do the job, under the
10 Atomic Energy Act, we do have the ability to work with EPA to
11 bring that authority under Superfund to bear as well.

12 We met last week with the current President of Safety
13 Lite and Metrial which is basically one individual, and toured
14 the facility and we concluded that the current operation is
15 fairly well controlled. They had invested in some new
16 equipment which significantly upgrades the operation. They are
17 monitoring their releases and they are doing some things to
18 reduce the inventory of radioactive waste. They did make one
19 substantial shipment in April. We are wanting to keep their
20 feet to the fire on that, however.

21 We are planning to coordinate with Pennsylvania on
22 the radium. In fact, associated with this, we have just in the
23 last few days contacted Pennsylvania.

24 Our plan is to take all the information we have
25 gathered and conduct an enforcement conference and then develop

1 the appropriate enforcement mechanism to force as rapid a
2 clean-up as we can get.

3 I think this is the difficult part of this kind of
4 problem, if he just is not able to get the necessary funds,
5 either from the organization he purchased the site from or from
6 some contractor that he did work for that may feel some
7 obligation from the past, we may be forced with the necessity
8 of basically asking him to show cause why we should not shut
9 that operation down and have some government entity assume the
10 responsibility to go clean it up.

11 The license requires him to clean it up and he has
12 told us, last Friday when I was there, that he feels an
13 obligation under the license to clean it up but he doesn't have
14 the money. The quandary really is whether we try to help him
15 get the money, try to go along with him or whether we just bite
16 the bullet and shut it off now.

17 We haven't decided that yet. We have to see what he
18 says and what these other companies say in response to our
19 letter. We are trying to get the financial information.

20 MR. TAYLOR: I think any enforcement is still very
21 pre-decisional and we still have to look at the possibility of
22 how to apply appropriate enforcement.

23 MR. THOMPSON: I will talk about AMS later on which
24 is one that faced a similar challenge and had reached an
25 approach.

1 CHAIRMAN ZECH: Before you go on, let me just say on
2 this Safety Lite Corporation situation, I recognize it is a
3 quandary but it is a quandary we have to figure out an answer
4 for.

5 MR. SLOJBLOM: We will.

6 The next facility we would like to talk about is one
7 of three commercial facilities that produce fuel for commercial
8 reactors, the Combustion Engineering facility in Connecticut.

9 [Slide.]

10 MR. SLOJBLOM: As background, it is an older
11 facility. It was built a number of years ago. It has
12 operated, been producing fuel for some time. As such, it was
13 not feeling the need for improvements. The previous management
14 had been there since basically the facility began operating.
15 It wasn't correcting the problems that were being developed.

16 They began to have problems with the fuel quality and
17 they had some fuel failures in commercial plants that they were
18 providing the fuel to. I believe that began to get their
19 attention when some of the customers got concerned. Also, as
20 background, we began getting some feelings in the region that
21 the regulatory performance needed some additional attention so
22 we began putting Region based specialists/inspections there on
23 a more frequent basis across a number of technical disciplines.
24 We began to find some repeated violations in the health and
25 safety area and the criticality safety area.

1 We have had now two enforcement conferences since
2 last December and have had some recent inspections. We are now
3 developing what we are going to do with those results.

4 The underlying problems here basically are a
5 management problem, of course, problems are with defining what
6 management expects, both in terms of the quality of the
7 operation as well as the safety performance of the operation.

8 The technical staffing is somewhat weak. The
9 procedures had not been upgraded and I might say that a number
10 of months ago the company did hire a contractor to come in to
11 try to help them get their procedures but very recently they
12 concluded the company they hired couldn't do the job. They
13 have elected now to start over. They couldn't contract that
14 kind of thing out.

15 There were problems with procedures, similarly
16 associated with the procedures is a problem with training and
17 what they expect of the operators of this facility. Lastly,
18 there were weaknesses in the company finding its own problems
19 so they could fix them. We have NRC coming in and finding
20 problems.

21 CHAIRMAN ZECH: Do we have a public health and safety
22 problem here?

23 MR. SLOJBLOM: Basically what we are talking about is
24 enriched uranium, three, four, five percent and we could have a
25 release but it would not constitute a significant off-site

1 exposure.

2 CHAIRMAN ZECH: Is it a security problem?

3 MR. SLOJBLOM: There are security requirements, of
4 course, for which material -- we have not had security
5 problems.

6 CHAIRMAN ZECH: Safeguard problem?

7 MR. SLOJBLOM: We have not had findings in that area
8 yet.

9 MR. THOMPSON: Mr. Chairman, there are some workplace
10 contamination type problems associated with the equipment
11 operations and their health physics approach. I think there
12 are some aspects that are a regulatory concern. They are in
13 essence operating today in compliance with our rules and
14 regulations but what we see is a declining performance. We
15 want to take some particular actions to make sure they are
16 aware of our concerns and they are taking some actions and I
17 think Glen is going to talk about briefly to turn that
18 performance around and keep it up at the level that we would
19 like to see.

20 CHAIRMAN ZECH: We would like to hear about that.

21 MR. SLOJBLOM: May I have the next slide?

22 [Slide.]

23 Recently say a year or so ago, we believe the
24 corporate recognition of this problem began partly as I said
25 due to the fuel quality issue as well as the more frequent NRC

1 inspection findings and there has been now a new position
2 established, namely a vice president for nuclear fuel
3 manufacturing.

4 There also has been a new plant manager picked as
5 well as a new manager of radiation safety, criticality of
6 safety and industrial safety. So they've made some significant
7 management changes. I've interviewed them myself. I believe
8 they have the capability of turning this around but the
9 attention to all these other areas including augmenting the
10 technical staffing is something they need to turn to and they
11 need to improve their own ability to find problems and fix
12 them.

13 They have established some program definitions, some
14 goals if you will for improvements. We just have not seen that
15 yet. We have not seen the improvement. Furthermore, we keep
16 seeing repeat violations in some of the areas we audited
17 earlier. So, we're just not convinced that at this point
18 they've got the necessary program in place to get their own
19 problems found and fixed.

20 So what we concluded in the senior management meeting
21 was that the staff needs to continue to place attention on this
22 licensee. That's shown some of the elements that we're going
23 to complete. Take the existing inspections and carry out the
24 appropriate enforcement action if that's called for and what
25 we're going to do something like the reactor program does.

1 We're going to prepare a systematic assessment of licensee
2 performance, a SALP report based on the last year and a half or
3 two of our findings, of our inspections and do that as a way of
4 communicating more completely with the licensee what we think
5 of them.

6 Also to establish a benchmark under which to judge
7 their improvement program as it proceeds. Once that report is
8 finished, we expect that around the first of September, we
9 intend to meet with Combustion Engineering in the plant area
10 and have a meeting on that report and discuss that report and
11 what their plans are to approach the findings from that.

12 Then following that, it's our intent to meet
13 periodically to go over the improvements as they progress
14 similar to what was done in the case of Region II at the NSF
15 facility over a few years, try to monitor and make sure that
16 we're fully cognizant of what they're doing and how well
17 they're improving their operation. That completes basically
18 what we had.

19 CHAIRMAN ZECH: Questions, my fellow Commissioners?

20 COMMISSIONER CARR: I visited that place in May.
21 They talked like they knew they had problems. They said they
22 were committed to modernization of that site in Connecticut and
23 they were shifting primary operations and they were going to
24 get a handle on all of their problems at that site, listened
25 carefully and looked but you're right, they've got some

1 problems and they've committed -- it looks like they've got a
2 corporate commitment to clean them up but I agree with you,
3 they will require continued looks.

4 MR. SLOJBLOM: We are coordinating with Region III as
5 well because as you indicate, the intent is to shift part of
6 the production operation that's on-going to the Missouri
7 facility.

8 MR. PAPIERELLO: Region III plans on meeting with the
9 management at Hematite and discuss the problems that occurred
10 in Connecticut. If they can assure us that we're not going to
11 have repetition.

12 COMMISSIONER CARR: It looked like they were trying
13 to transfer some of their problems and upgrade some of their
14 others.

15 CHAIRMAN ZECH: Any other questions?

16 MR. THOMPSON: I think that I'll just address some of
17 these others --

18 CHAIRMAN ZECH: Before you go on, let me just make a
19 comment on this. Here's a facility that certainly looks like
20 we need results again. It's like some of the other plants
21 we've talked about. You hear about all these programs, all
22 these commitments to do things wonderfully. How long do we
23 wait? You ought to let them know that we expect results. We
24 expect them pretty soon.

25 MR. TAYLOR: I believe we just in the past couple

1 months issued civil penalties; isn't that right?

2 MR. PAPIERELLO: Yes, there was one for, I believe it
3 was \$12,000.

4 MR. TAYLOR: Rather significant, so we're using that
5 as part of the way to deliver the message --

6 CHAIRMAN ZECH: Good. Fine.

7 MR. TAYLOR: Now we'll watch it.

8 CHAIRMAN ZECH: All right.

9 MR. THOMPSON: Bill Russell and I both will be
10 meeting as part of the SALP program with the senior management.
11 We're looking, I believe, at a program that should start seeing
12 results before the end of the year.

13 CHAIRMAN ZECH: Good. Well, improvement programs are
14 always very good and so forth but it depends on how well
15 they're executed sometimes. How well they're implemented.
16 Sometimes if you just stop one and start another one, that
17 doesn't do too much. You've got to see results. If one
18 doesn't work, why didn't it work?

19 Why do they think the new one will work? You know,
20 it looks like they're making changes. It looks like they're
21 saying the right things, but I think you'll want not only to
22 give them a fine and whatever necessary to get their attention,
23 but you want to see results. You want to see increased
24 performance and increased safety. You need the Commission's
25 help? Let us know.

1 MR. THOMPSON: The next issue we just want to
2 highlight very briefly for the Commission, is Finley Testing.
3 That's the one where you'll remember, the radiographer has
4 surrendered his license and he has a commitment not to
5 participate in licensed activity for the next three years.
6 Obviously, we're in the process of preparing an information
7 notice to the industry with respect to the lessons learned in
8 the situation that occurred there but what it raises is the
9 issue of identifying an individual who has got a commitment not
10 to participate in NRC licensed activity over a certain period
11 of time.

12 As you know the Commission has asked us to look at
13 that. That's a very important, very critical issue as to how
14 you look at individuals. The name of individuals who have
15 regulatory concerns and we'll be coming to the Commission with
16 a Commission paper and our recommendations before the end of
17 the year.

18 CHAIRMAN ZECH: All right.

19 MR. THOMPSON: If I could have the next slide.

20 [Slide.]

21 Generally, these are those types of facilities that
22 we have agreed on the course of action or in fact they may have
23 -- an action has been implemented in which we are satisfied in
24 one case, very satisfied, with the results to date. Since
25 we're a little pressed for time, we're going to highlight just

1 a couple of these. With respect to the U.S. Testing we are
2 satisfied that that was an effort that has been put in place
3 with respect to the training of the radiation safety officer at
4 the job sites but that's one where I think there was a very
5 successful effort by the staff -- Bonnie, I think --

6 CHAIRMAN ZECH: Do we have this slide? I don't see
7 it?

8 MR. THOMPSON: It's called "additional facilities."

9 CHAIRMAN ZECH: Okay. We've got that one.
10 Somewhere.

11 MR. THOMPSON: But this is one which -- a licensee
12 which really is doing business throughout the United States
13 which we identified some problems with well-coordinated -- the
14 regions did a very coordinated effort and assist inspections,
15 in identifying that the corrective actions were put in place.
16 It's still one that we would put on the closely-watched list
17 ourselves for the activities and to make sure those things were
18 put in place which led to the ASNT support for the
19 certification program and radiographers which we have briefed
20 you on before.

21 Sequoyah Fuels. You know, that's one where we
22 followed up from the accident. This is one where we're now
23 satisfied with the performance -- has reached our level of
24 expectations. It is one where there is a concern with respect
25 to the purchase of that facility by another utility. We're

1 obviously looking at the key aspects of any personnel changes
2 that may impact safety as well as the financial assurance
3 requirements.

4 That financial assurance will kind of come up again
5 on the next facility which is Atlas. Atlas was the mill
6 facility there which we had continued to have difficulties in
7 getting them to comply with the financial surety arrangements.

8 Finally, Region IV issued them a order denying their
9 license and demanding that they start their decommissioning
10 activities if they didn't go through this hearing process. It
11 turned out that that was a move that suddenly they were able to
12 come up with the financial surety arrangements that satisfied
13 our needs and it's one where it probably will set a precedent
14 for other actions that we may need to take with these types of
15 licensees in the future.

16 Wright Patterson and the U.S. Air Force -- another
17 major licensee that's been before the Commission this past
18 year. We have been implementing the follow up actions to make
19 sure incidents are properly reported to Region IV. They tend
20 to be reported probably now a little more frequently than need
21 be but I think they are certainly making a major effort to do
22 that as well as identifying any of those activities that may
23 have pre-existed -- what we call the broad scope licensee
24 material activities that were there.

25 I'm satisfied that the Air Force is progressing in

1 complying with their licensed activities to date. I think we
2 are generally pleased with the Air Force performance. I should
3 note for the Commission that GAO is conducting an audit of this
4 type of license which is the kind of the master material broad
5 license for the Navy and for the Air Force and they're kind of
6 comparing that with the Army which does not have this kind of
7 master broad license activities.

8 CHAIRMAN ZECH: Does the Air Force pay their money?
9 Or is it still --

10 MR. TAYLOR: No, sir. They haven't yet. We have not
11 -- I think they have a little more time to respond.

12 MR. THOMPSON: The next facility is Case Western
13 Reserve University in Cleveland, Ohio. Again, it's a broad
14 scope material licensing that does research and development.
15 They have about 200 individual users, 300 labs and 700
16 individuals badged. As a result of NRC's inspections in
17 November, they identified some lack of management control,
18 contamination of the laboratory space, food, beverages getting
19 in the laboratory activities.

20 Region III in an enforcement action shut down that
21 facility in late November and got corrective actions identified
22 and agreed to such that they allowed them to start back up, I
23 guess, late -- middle part, early part of December in 1987.

24 They had some personnel problems associated with
25 their radiation safety officers. They have now replaced those

1 people. Based on inspections, we've seen rather significant
2 improvement in the control of those facilities and the cleanup
3 in the laboratories and we think that's going well. Again
4 though we're still watching it carefully because it's still
5 fairly new in the program.

6 V.A. Hines, Veterans Hospital, which has a fairly
7 large diagnostic type of program, the NRC identified problems
8 with respect to the communications from the radiation safety
9 officer and nuclear medicine staff. Lack of adequate control.
10 Remember this was a case where there was a medical
11 misadministration. As a result of the NRC's concern, the
12 radiation safety officer now reports to the chief of the
13 hospital staff. Some top management now is clearly involved
14 and there have been some key personnel replaced at that
15 facility.

16 You might remember that the doctor involved recently
17 pled guilty to failure to report a medical misadministration
18 and likewise obstruction of the NRC investigation of the
19 matter.

20 This led us to look a little bit more broadly at V.A.
21 hospitals. If we looked at it over the years, we noticed for
22 the number of V.A. hospitals that are currently licensed that
23 they were about four or five percent, they were getting about
24 eight to nine to ten of our escalated enforcement activities.

25 This was a consistent pattern. We've met with the

1 V.A. headquarters, their national health and safety committees
2 to try to identify what V.A. as an agency can be doing to
3 improve their performance. They have now developed an action
4 plan looking at a couple of key things such as the workload for
5 the radiation safety officer, their training, their
6 qualifications. Likewise their own program to audit their
7 hospital programs to ensure that these facilities are getting
8 the appropriate level of attention.

9 We would anticipate a meeting later with the V.A.
10 headquarters here in August and I guess Carl, you've had some
11 meetings with them here. We've also conducted some training
12 activities with their regional industrial hygienist group of
13 individuals.

14 COMMISSIONER CARR: That all will get fixed when
15 they're cabinet level.

16 MR. THOMPSON: If you say so.

17 VOICE: You believe in the tooth fairy, too.

18 MR. THOMPSON: The next facility is the Advanced
19 Medical Systems and this is again kind of a key theme that we
20 face. Licensees who have been in existence for a fairly long
21 time, have fairly extensive contaminated facilities and small
22 resources and they do not commit to the cleanup activities at
23 the rate that seems appropriate.

24 COMMISSIONER CARR: Where are they?

25 MR. THOMPSON: They're in Cleveland, London Roads,

1 Ohio, I believe. Right near Cleveland, Ohio. They're a
2 manufacturer and distributor of large cobalt-60 cesium 137
3 industrial medical radiography devices.

4 They had been identified as just failure to clean up
5 their facilities, to run a good program, to have adequate
6 staffing or radiation safety officer and after a significant
7 amount of attention by Region II and in fact I guess you guys
8 issued them an order to in fact and demanded that they start
9 cleaning up activities and implement their decontamination plan
10 and it takes some negotiations.

11 It's not anything that we have to be totally
12 inflexible on but once we issued the order they did get a full-
13 time radiation safety officer for that facility. They have
14 started cleaning up. In fact three of their major work areas
15 now have been cleaned up.

16 I think they're still negotiating with Region III
17 with respect to the scope of the decommissioning plan and the
18 time frame. It really tends to be more of a time frame right
19 now. I think we're headed in the right direction with them.
20 Again, it's one that we need to watch very closely.

21 Finally, I guess I'd like to say that we did have a
22 success story to talk about and I'd kind of like to end our
23 portion of the discussion with a discussion of NFS-Irwin and
24 anything you might want to say on B&W too. I'll just turn it
25 over to you but that's a facility that you know we, the

1 Commission, have been very concerned about that's the only fuel
2 cycle facility up until very recently that had a resident
3 inspector.

4 It's one in which we -- it's an important facility
5 for the national interest, so --

6 MR. GRACE: Well, I think as you all know, the NFS
7 facility is located in Irwin, Tennessee and they make fuel
8 that's shipped off to B&W, Navy and United Nuclear for
9 fabrication into nuclear cores for the Navy. However, I
10 remember three years ago when we first suspected a breakdown in
11 the radiation protection program there because of failure to
12 contain radioactivity within process equipment and there were
13 several releases into the work areas contaminating workers and
14 so forth.

15 I visited the site a few months after I arrived in
16 Region II and I was appalled at the conditions there and some
17 of the Commissioners who visited there can share my feelings
18 about it. I'd never seen anything like it since Apollo. They
19 had poor habits over the years that resulted in contamination
20 outside the buildings. You'll remember, Mr. Chairman, we
21 visited there a couple years ago. We were outside and you
22 asked why are we wearing shoe covers? The walkways and the
23 driveways were contaminated.

24 CHAIRMAN ZECH: I remember it.

25 MR. GRACE: And they have since cleaned that up. We

1 instituted an improvement program and there was a confirmatory
2 order on that and they've gradually been making improvements
3 but they were -- seemed content with minimal safety
4 requirements, minimal satisfaction of the regulations and in
5 fact, they said that any improvements beyond the regulations
6 they would appreciate it if NRC would require these changes
7 because otherwise they were concerned they wouldn't get funded
8 for them from their customer.

9 Well, that changed too. They were more courageous
10 about taking initiatives and making improvements and taking a
11 chance on getting compensated. I think the big -- that also
12 there was a very serious labor-management relationship there.
13 It was very poor. In due time they did change out the plant
14 manager and got a new person who had formerly been manager at
15 GE Nuclear Facility and he has made a big difference.

16 In addition, the union changed their leadership and
17 there's a much better relationship now between labor and
18 management. There was an inadequate number of health physics
19 professionals and they've staffed it up. They've brought in a
20 very strong safety manager from Hanford, from Westinghouse, and
21 he's a very strong leader and he has acquired in turn some good
22 people.

23 So, again, I think the big turnabout came from a
24 change in leadership as we see everywhere else we look and we
25 have pulled back our resident. Our resident has been there for

1 a number of years. He's now spending about half his time at
2 B&W Navy where some concerns are developing but I don't have a
3 good assessment of it yet. It's certainly not nearly the
4 concern we had at NSF-Irwin. Now with our resident spending
5 half his time there, we're going to get a better look at that
6 facility.

7 The end. I think that summarizes our comments on
8 that. We're still watching it and we'll monitor it closely.

9 CHAIRMAN ZECH: Thank you.

10 MR. SLOJBLOM: Mr. Chair, that concludes our briefing
11 on the results of the management meeting and we're prepared to
12 answer any questions you have on any subject you wish.

13 CHAIRMAN ZECH: Well, we've kind of asked them as we
14 went along but let me see if my colleagues have any other
15 questions. Mr. Roberts?

16 COMMISSIONER ROBERTS: No.

17 CHAIRMAN ZECH: Mr. Carr?

18 COMMISSIONER CARR: I was just wondering who left
19 Georgia Tech off of the worried list or should it be on there?

20 MR. THOMPSON: I'm sorry. Could you just say it one
21 more time?

22 COMMISSIONER CARR: Georgia Tech, their reactor.

23 MR. THOMPSON: I don't have reactors.

24 [Laughter.]

25 COMMISSIONER CARR: That's why I asked who left it

1 off the worry list. I don't know whose list it ought to be on.

2 MR. THOMPSON: John Bradburns. That's whose worry
3 list it ought to be on.

4 [Laughter.]

5 MR. SLOJBLOM: We find that at the management meeting
6 to go through what you've heard here today is now taking us
7 just about two full days and nights. We want and we're looking
8 for adding other features to the meeting but we're really
9 pushing it. The Commission has asked us for example to look at
10 some of the good attributes and aspects of facilities that we
11 can identify that others might also learn from which would be
12 useful to do but we're just really really running very hard up
13 on time to add very much to what we do now.

14 We would literally have to at least add another day
15 if we try to take on much more.

16 COMMISSIONER CARR: I was just concerned. It seems
17 like we got a little notice went by said they had some problems
18 down there and then it dropped out of sight. I haven't heard
19 anything more about it.

20 MR. SLOJBLOM: I want to make it very clear we did
21 not include -- research and test reactors are not included in
22 our management readings.

23 CHAIRMAN ZECH: Well, perhaps you can tell us in just
24 a very short sentence or two the status of it now is there a
25 problem or is the problem resolved? Is it shut down? What's

1 the status of it?

2 MR. GRACE: It's shut down. It's in limbo. They're
3 conducting a comprehensive review of the feasibility of
4 continuing operations with Georgia Tech Reactor from a business
5 and an educational point of view. I've met with the president
6 of Georgia Tech several times. They've just completed as a
7 matter of fact this review by an ad hoc committee and they're
8 suggesting that the reactor be restarted when they've fixed all
9 their problems.

10 We have been quite open with Georgia Tech about our
11 concerns about management attitudes. There again they had
12 developed some bad habits over the years and the president of
13 Georgia Tech assures me that he's going to have a different
14 management line with different responsibilities defined and we
15 have them on hold. We have a clear understanding that they're
16 not going to start up again until we approve.

17 COMMISSIONER ZECH: Plant is shut down and the
18 situation's being reviewed; is that correct?

19 MR. TAYLOR: We moved very rapidly when that
20 experiment went afoul to follow up on the aftermath of that and
21 then of course they didn't run the reactor again. So that
22 situation, a lot of very rapid attention of staff when they had
23 that failed experiment.

24 CHAIRMAN ZECH: Mr. Carr?

25 COMMISSIONER CARR: No.

1 CHAIRMAN ZECH: Mr. Rogers?

2 MR. GRACE: No.

3 CHAIRMAN ZECH: Well, let me just thank the staff for
4 a very valuable presentation. I know it takes a lot of work to
5 put this presentation together and we've asked you to cover a
6 lot of ground. That's true. Not only the reactors but the
7 material licensing situation.

8 Mr. Stello, you're correct when we asked you last
9 time to tell us about some of the plants that you're able to
10 give reduced attention to and I know you didn't do that here
11 today and I appreciate the reason why because of time and
12 you're focusing on the others, but perhaps next time you could
13 do that.

14 I think what you're doing is very commendable.
15 You're trying to focus on your priorities. You're trying to
16 focus on the plants that really need attention, material
17 licensees that really need attention recognizing we do not have
18 unlimited resources, either people or dollars and recognize
19 that we audit. That's how this agency carries out our mission.
20 We only can spot check. We only can review in an audit-type
21 way and therefore we cannot cover 100 percent of what we would
22 like to cover.

23 By the same token it's awfully important I think to
24 recognize that when you do move resources around from one plant
25 for example to another it means that you're taking them away

1 from one plant because your concerns are less. I appreciate
2 that fact. That does mean that those who get a number of SALP
3 one ratings perhaps will get reduced review and that's of
4 course the definition I believe of your category one.

5 That does mean on the other hand that you're moving
6 them to category three. Therefore I do think it's important.
7 Perhaps next time you can figure out a way to at least perhaps
8 enumerate those plants in category one that have -- that aren't
9 having reduced inspection and reduced oversight. At least it
10 will show the balance of where we're putting our resources.

11 We don't have to elaborate on that part of it at all
12 but I think it will be helpful to us to show that what we're
13 trying to do with this is not only focus on safety and focus on
14 our primary mission but also in a responsible manner use our
15 resources to do that safety mission that we have that's so
16 important to carrying out our statutory responsibilities.

17 I thought the meeting was extremely valuable. I
18 really appreciate the effort that goes into it and I know I
19 speak for all of my colleagues when I say we appreciate the
20 staff's thoroughness and carefulness. We do have a tremendous
21 responsibility to carry out. We don't have unlimited resources
22 and I think it's very important we do focus on these priorities
23 and especially focus on those plants, those facilities that
24 need our resources. So I thank you very much for a very
25 valuable presentation. We stand adjourned.

[Whereupon at 3:25 p.m. the hearing was concluded.]

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CERTIFICATE OF TRANSCRIBER

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

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

PLACE OF MEETING: Washington, D.C.

DATE OF MEETING: WEDNESDAY, JULY 13, 1988

were transcribed by me. I further certify that said
transcription is accurate and complete, to the best
of my ability, and that the transcript is a true and
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PERIODIC BRIEFING ON STATUS OF
OPERATING REACTORS

COMMISSION BRIEFING
JULY 13, 1988

THOMAS E. MURLEY, DIRECTOR
OFFICE OF NUCLEAR REACTOR
REGULATION

CATEGORIES FOR SENIOR MANAGEMENT PROBLEM
PLANT DISCUSSIONS

1. PLANTS REMOVED FROM THE LIST OF
PROBLEM FACILITIES

PLANTS IN THIS CATEGORY HAVE TAKEN
EFFECTIVE ACTION TO CORRECT IDENTIFIED
PROBLEMS AND TO IMPLEMENT PROGRAMS FOR
IMPROVED PERFORMANCE. NO FURTHER NRC
SPECIAL ATTENTION IS NECESSARY BEYOND
THE REGIONAL OFFICE'S CURRENT LEVEL OF
MONITORING TO ENSURE IMPROVEMENT
CONTINUES.

FORT ST. VRAIN

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

PLANTS IN THIS CATEGORY HAVE BEEN
IDENTIFIED AS CONTINUING TO RECEIVE NRC
ATTENTION FROM BOTH HEADQUARTERS AND THE
REGIONAL OFFICE.

NINE MILE POINT 1
SEQUOYAH 2
TURKEY POINT 3/4
DRESDEN 2/3
FERMI
FORT CALHOUN
RANCHO SECO

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

PLANTS IN THIS CATEGORY HAVE BEEN IDENTIFIED AS HAVING SIGNIFICANT WEAKNESSES THAT WARRANT MAINTAINING THE PLANT IN A SHUTDOWN CONDITION UNTIL THE LICENSEE CAN DEMONSTRATE TO THE NRC THAT ADEQUATE PROGRAMS HAVE BOTH BEEN ESTABLISHED AND IMPLEMENTED TO ENSURE SUBSTANTIAL IMPROVEMENT.

PEACH BOTTOM 2/3
PILGRIM
BROWNS FERRY 1/2/3
SEQUOYAH 1

PERIODIC BRIEFING ON STATUS OF
MATERIALS LICENSEES

COMMISSION BRIEFING
JULY 13, 1988

HUGH L. THOMPSON, JR., DIRECTOR
OFFICE OF NUCLEAR MATERIAL
SAFETY AND SAFEGUARDS

PRIORITY PROBLEM FACILITIES

3M COMPANY -- FAILURE OF STATIC ELIMINATORS

SAFETY LIGHT CORPORATION -- CONCERNS WITH
RESPECT TO:

1. SITE CONTAMINATION
2. STATUS OF CLEANUP
3. FINANCIAL RESPONSIBILITY
4. CHANGE OF OWNERSHIP ISSUES
5. TRITIUM DISPOSAL

COMBUSTION ENGINEERING, WINDSOR --
DECLINING PERFORMANCE DESPITE INCREASED
REGIONAL ATTENTION; INCREASED ENFORCEMENT
EFFORT

FINLAY TESTING -- LICENSE RETURNED;
REGULATORY FOLLOWUP DISCUSSED

ADDITIONAL FACILITIES DISCUSSED

U.S. TESTING -- RADIOGRAPHY
SEQUOYAH FUELS
ATLAS CORP. -- MILLING
USAF/WRIGHT-PATTERSON AFB
CASE WESTERN RESERVE UNIVERSITY
VA HINES HOSPITAL AND GENERIC CONCERNS
WITH VA
ADVANCED MEDICAL SYSTEMS -- SOURCE
MANUFACTURE
NFS ERWIN
BABCOCK AND WILCOX, LYNCHBURG

USR INDUSTRIES, INC.
(DELAWARE)

USR CHEMICAL
PRODUCTS, INC.
(NEW JERSEY)

USR LIGHTING
PRODUCTS, INC.
(NEW JERSEY)

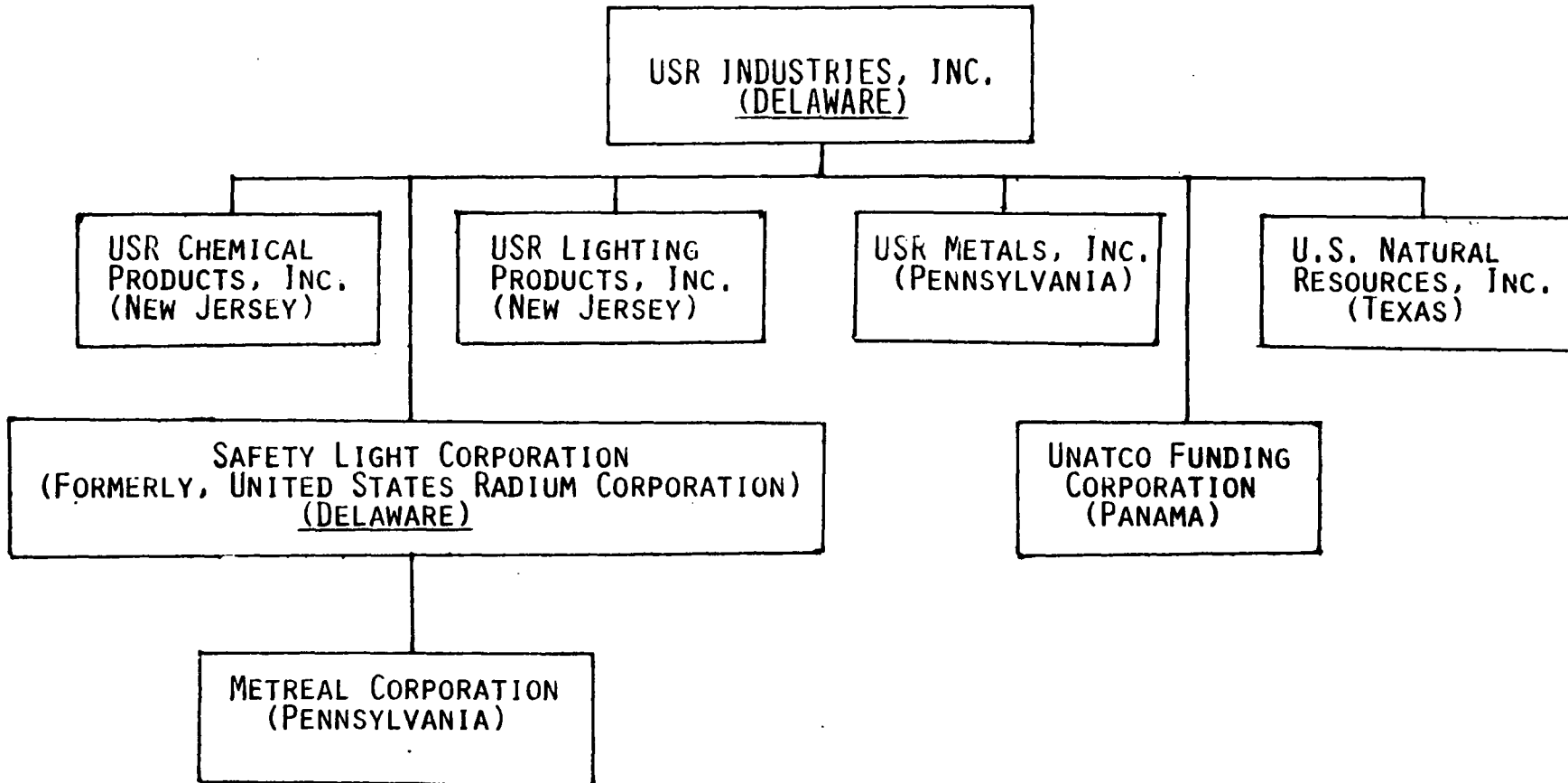
USR METALS, INC.
(PENNSYLVANIA)

U.S. NATURAL
RESOURCES, INC.
(TEXAS)

SAFETY LIGHT CORPORATION
(FORMERLY, UNITED STATES RADIUM CORPORATION)
(DELAWARE)

UNATCO FUNDING
CORPORATION
(PANAMA)

METREAL CORPORATION
(PENNSYLVANIA)



ISSUES-SAFETY LIGHT

BACKGROUND

- O ISOTOPE UTILIZATION AT SITE SINCE 1948
- O TRITIUM, STRONTIUM, CESIUM, RADIUM
- O IN SOIL; GROUNDWATER

CURRENT PROBLEM

- O NO DECONTAMINATION UNDERWAY OR
INTENDED IN NEAR FUTURE DUE
TO LIMITED RESOURCES
- O LACK OF NRC APPROVAL OF TRANSFER
OF OWNERSHIP
- O WASTE STORAGE

STAFF ACTION PLAN - SAFETY LIGHT

OBJECTIVE TO OBTAIN SITE CLEANUP AND
DISPOSAL OF WASTE IN STORAGE

- O UNDERSTAND COMPANY RELATIONSHIP AND
CONSIDER ACTIONS NEEDED
- O MEET WITH COMPANY ON SITE
 - WELL CONTROLLED OPERATION
 - WASTE INVENTORY REDUCED
- O COORDINATE WITH PENNSYLVANIA ON RADIUM
- O CONDUCT ENFORCEMENT CONFERENCE
- O TAKE APPROPRIATE ENFORCEMENT ACTION
TO REQUIRE FASTER CLEANUP

COMBUSTION ENGINEERING NUCLEAR FUEL FACILITY

BACKGROUND

- 0 OLDER FACILITY - LITTLE IMPROVEMENT
- 0 PREVIOUS MANAGEMENT DID NOT CORRECT PROBLEMS
- 0 PRODUCTION PROBLEMS - FUEL QUALITY
- 0 REPEATED VIOLATIONS

UNDERLYING PROBLEMS

- 0 MANAGEMENT
- 0 PROGRAM DEFINITION
- 0 TECHNICAL STAFFING
- 0 PROCEDURES
- 0 TRAINING
- 0 AUDITING

COMBUSTION ENGINEERING

RECENT SITUATION

- O RECOGNITION OF PROBLEM
- O AUGMENTATION OF MANAGEMENT
- O CONTINUED PROBLEMS FOUND BY NRC

STAFF PLANS TO CONTINUE ATTENTION

- O COMPLETE APPROPRIATE ENFORCEMENT
- O PREPARE SYSTEMATIC ASSESSMENT OF
LICENSEE PERFORMANCE (SALP)
- O SENIOR MANAGEMENT MEETING ON SALP
- O MEET PERIODICALLY TO REVIEW
PERFORMANCE