

ORIGINAL

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON EFFECTIVENESS OF DIAGNOSTIC EVALUATIONS

Location: ONE WHITE FLINT NORTH, ROCKVILLE, MARYLAND

Date: WEDNESDAY, NOVEMBER 23, 1988

Pages: 1-63

SECRETARIAT RECORD COPY

Ann Riley & Associates

Court Reporters

1625 I Street, N.W., Suite 921

Washington, D.C. 20006

(202) 293-3950

DISCLAIMER

This is an unofficial transcript of a meeting of the United States Nuclear Regulatory Commission held on 11-23-88 in the Commission's office at One White Flint North, Rockville, Maryland. The meeting was open to public attendance and observation. This transcript has not been reviewed, corrected, or edited, and it may contain inaccuracies.

The transcript is intended solely for general informational purposes. As provided by 10 CFR 9.103, it is not part of the formal or informal record of decision of the matters discussed. Expressions of opinion in this transcript do not necessarily reflect final determination or beliefs. No pleading or other paper may be filed with the Commission in any proceeding as the result of, or addressed to, any statement or argument contained herein, except as the Commission may authorize.

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 ***

4 BRIEFING ON EFFECTIVENESS OF DIAGNOSTIC EVALUATIONS

5 ***

6 PUBLIC MEETING

7 ***

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

11
12 Wednesday, November 23, 1988

13
14 The Commission met in open session, pursuant to
15 notice, at 10:00 o'clock, a.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 JAMES P. CURTISS, Member of the Commission
23
24
25

1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2

3 S. CHILK

4 W. PARLER

5 S. RUBIN

6 E. JORDAN

7 L. SPESSARD

8 J. TAYLOR

9 T. MURLEY

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

P R O C E E D I N G S

[10:03 a.m.]

CHAIRMAN ZECH: Good morning, ladies and gentlemen.

This is an information briefing this morning in which the Staff will inform the Commission concerning the effectiveness of the Diagnostic Evaluation Program. The Diagnostic Evaluation Program was developed to provide additional information to assist senior management in evaluating operating plants where the trends in data available are not so clear, particularly in those cases where indications are that there may be problems, and additional regulatory oversight may be warranted.

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

Do any of my fellow Commissioners have any opening comments before we begin this morning?

[No response.]

CHAIRMAN ZECH: If not, Mr. Taylor, you may proceed.

MR. TAYLOR: Good morning, sir.

I'd like to mention two points from the EDO's office with regard to these diagnostics, and first I'd like to emphasize, as you have stated, that it has been very useful for the periodic senior management meetings, where we've decided that we may need more and deeper information to understand some of the root causes of problems in a plant, out of those

1 meetings come, at least, some of the requests for these
2 diagnostic inspections, and it has been very useful to the EDO
3 and the senior managers in that way, to try to get behind what
4 are causing some of the difficulties at some of the plants
5 which we discuss.

6 Importantly, I think, too, the EDO has received
7 feedback from licensees who have had these types of inspections
8 to the effect that in general the licensees have felt that
9 these inspections and reviews have been conducted in a very
10 professional manner. They have complimented the Staff on the
11 thoroughness of the reviews, and most importantly, that they've
12 been helpful to the companies in trying to focus in on
13 problems, perhaps, that they may be too close to have seen in
14 the clarity provided by these inspections.

15 So we've had some good comments in regard to the
16 helpfulness to the companies with this type of review.

17 With that introduction, I'll turn to Ed Jordan, whose
18 office is responsible and puts these together at the request of
19 the EDO.

20 MR. JORDAN: Thank you, Jim.

21 This briefing is a follow-up to the November 24, 1986
22 SRM that approved the development and requested a briefing on
23 its effectiveness after a few were completed, so we're here
24 with a few completed. Although AEOD has the lead for this
25 program, the program relies heavily for support from the other

1 offices, principally NRR and the Regions for expert team
2 members, and we appreciate that excellent support.

3 We're very proud of the accomplishments of this
4 program to date. Although we continue to learn and evolve the
5 program, it has matured to be an effective tool, and we feel
6 that it is beneficial in assisting management to understand the
7 basic causes of performance problems or issues.

8 We briefed the ACRS on this program in October of
9 this year, and they currently plan to discuss the impact and
10 the value with some of the utilities that have received or
11 experienced diagnostic evaluations, so we'll be interested in
12 that feedback.

13 At this time, I would like to introduce Lee Spessard
14 as the responsible Division Director. Stu Rubin on the far
15 right is the responsible Branch Chief.

16 Lee has managed each diagnostic evaluation directly
17 onsite, and Stu has been a team leader for two, and Lee
18 Spessard will make the presentation.

19 CHAIRMAN ZECH: All right. Thank you very much. You
20 may proceed.

21 MR. SPESSARD: Yes, sir.

22 I'd like to start with Slide 2, which is a
23 presentation outline, and briefly I want to give you an idea of
24 what I want to cover today.

25 First, I'm going to cover what our program actually

1 consists of, what we've developed to date, explain exactly what
2 the diagnostic evaluation is, what our program objectives are,
3 although I'll admit, sir, you've described them very clearly
4 this morning; the special features of a diagnostic in terms of
5 how it compares with a typical NRC team inspection, and then
6 finally the documents that we've developed to date.

7 Also in the evaluation process itself, I'd like to go
8 through how a plan actually is selected, the evaluation areas
9 that we consider, the planning and the preparations that are
10 involved in one of these diagnostics, as well as the evaluation
11 sequence, and then finally how we communicate our results.

12 Also, I will talk about the results to date of the
13 three diagnostics that we have done in general terms,
14 discussing such things as root causes, performance problems,
15 the performance strengths as well as improvements that we have
16 observed at four performing plants, as well as weaknesses, and
17 then finally the EDO staff actions that have resulted from
18 those, and then I'll sum up the conclusions in terms of the
19 effectiveness of this program.

20 Okay, diagnostic evaluation: We defined that for my
21 program as a broadbased, independent evaluation of licensee and
22 plant safety performance. It encompasses technical,
23 programmatic, management and organizational aspects.

24 The program objectives --

25 COMMISSIONER CARR: Let me ask you on that one, when

1 you say "independent," I read the think that says it's
2 independent of people who would normally inspect.

3 MR. SPESSARD: Yes, sir.

4 COMMISSIONER CARR: But it's not independent from --
5 I mean, it's still NRC inspectors.

6 MR. SPESSARD: Well, I'm going to cover that, sir.
7 But independent -- when we mean independent, we mean in terms
8 of a significant involvement at that plant. For example, if we
9 select a plant in Region I, we will use senior resident
10 inspectors or other Region-based inspectors, but they'll come
11 from a different region. We'll use NRR staff that have not
12 been involved in licensing activities at that plant or
13 enforcement aspects. So that's what we mean in the sense of
14 "independence."

15 COMMISSIONER CARR: What do you gain by that?

16 MR. SPESSARD: Well, just -- we do -- we provide a
17 fresh --

18 COMMISSIONER CARR: I say, what do you gain by that?

19 MR. JORDAN: What we believe we gain is that the
20 findings of these people are based on their direct assessments,
21 not their previous view of that particular plant, so that there
22 is a level of independence, and the previous findings are not
23 the basis for their present findings.

24 COMMISSIONER CARR: Okay.

25 CHAIRMAN ZECH: Let's proceed, please.

1 MR. SPESSARD: Yes, sir.

2 In terms of our program objectives, we believe that
3 we provide the Agency's senior managers with an improved
4 understanding of the licensees' safety performance to guide
5 appropriate regulatory action. We give them an up-to-date
6 snapshot, if you will, of the performance of the plant at that
7 time.

8 We evaluate the effectiveness of the programs, as
9 well as the management practices, for achievement and
10 maintaining a high-level of safety performance.

11 And finally, I think, most importantly, we determine
12 the root causes of identified problems that affect plant or
13 organizational performance.

14 This is very important, because it enables us to
15 determine whether or not the licensee's ongoing actions and
16 plans for improvement are likely to succeed. It further is
17 very important to the Agency's senior managers in determining
18 whether or not eventual regulatory action above and beyond
19 what's currently being done may be needed.

20 The special features of the diagnostic cover two
21 pages in your handout, and it's my intent to discuss these in
22 more detail later, so I'll only hit on these briefly. But I
23 wanted to point these out to you, because I know the Commission
24 has been briefed on other NRC team inspection programs, and out
25 program is different.

1 To begin with, the EDO requests the plant that we
2 will visit. The EDO approves the team, as well as the actual
3 plan that we developed in a broad sense. Each plan is
4 different, because utilities performance problems are
5 different, and so each one is tailored to the specific needs of
6 the NRC's senior managers.

7 We've mentioned about the fact that the team is
8 headed by an SES manager. We also have a deputy SES person on
9 that team. And in the last one we did, we had an NRR SES
10 branch chief participate as rotation assignment. The members
11 are independent, and I won't discuss that further.

12 We make extensive use of management consultants, and
13 we also use engineering consultants, if engineering support
14 problems are evident.

15 COMMISSIONER ROBERTS: Tell me about these management
16 consultants.

17 MR. SPESSARD: Well, we have management consultants -
18 -

19 COMMISSIONER ROBERTS: Such as who?

20 MR. SPESSARD: Well, the people we've actually used
21 are Dr. Wert and Dr. Thurmon. Both of these individuals are
22 degreed in behavioral sciences. They have extensive experience
23 in doing these type of assessments in large companies. In some
24 cases, they've actually consulted for utilities themselves.
25 They provide our team with a vast amount of experience that we

1 just don't possess internally on staff. So we hire that
2 expertise.

3 COMMISSIONER ROBERTS: Are these competitively
4 awarded?

5 MR. SPESSARD: Yes, sir; yes, sir.

6 COMMISSIONER ROBERTS: Okay.

7 CHAIRMAN ZECH: You may proceed.

8 COMMISSIONER CARR: Do you screen them for
9 independence as well?

10 MR. SPESSARD: Yes, sir.

11 CHAIRMAN ZECH: All right. Proceed, please.

12 MR. SPESSARD: The evaluation is very comprehensive.
13 It covers the plant as well as the corporate. We assess
14 management effectiveness, as well as the organizational culture
15 and climate, and that's typically where we use our management
16 consultants as well as our team leaders and managers.

17 COMMISSIONER CARR: What kind of criteria do they
18 use?

19 MR. SPESSARD: We look at what we'll call predefined
20 organizational factors and then those factors and the influence
21 on the performance problems that we find. But typically -- I
22 have a list of them here -- we cover such things as goals and
23 objectives setting, performance standards, monitoring and
24 feedback, communication and problem-solving, management
25 information systems, planning and scheduling, and staffing,

1 just to mention a few.

2 COMMISSIONER CARR: But is that what these
3 consultants provide you the expertise in?

4 MR. SPESSARD: Yes, sir. We actually assess those
5 programs, practices, et cetera, that exist to get a clear
6 understanding of them, and then look at the impact on the
7 organizational culture and therefore the impact on safety
8 performance itself. We do this by virtue of conducting
9 extensive interviews. We typically will do at least a hundred.

10 COMMISSIONER CARR: Oh whom?

11 MR. SPESSARD: Well, they vary anywhere from, for
12 example, the Chairman of the Board down to technical workers in
13 the field.

14 At the senior management level, the organizational
15 consultants and I, or one of my deputy managers participate in
16 those.

17 COMMISSIONER CARR: Do you select those, or do they
18 just send them in? Do you say, "I want five reactor
19 operators," or do you just --

20 MR. SPESSARD: No, sir. We select them. We select
21 them. We select on the basis of a well-representative sample
22 across the organization to get as clear a picture as possible,
23 and in our planning process where we see performance issues
24 before we get there, we skew, in some cases, interviews to make
25 sure we have a good understanding of why those performance

1 problems exist. But it's not a statistically definable type
2 approach.

3 We emphasize root cause determination. We also find
4 NRC contributing causes to performance problems, if they are
5 there. And finally, the EDO transmits this report to the
6 utility and generally will require a response. And
7 furthermore, the EDO will assign staff actions as appropriate
8 to follow up on either generic or plant-specific issues.

9 COMMISSIONER CARR: Give me an example of an NRC
10 contributing cause.

11 MR. SPESSARD: I'm going to talk about them later,
12 but one right at the top --

13 COMMISSIONER CARR: All right.

14 MR. SPESSARD: Well, let me answer that, if I may.
15 One would be lack of approval of in-service testing programs
16 for pumps and valves. There are a large number of programs
17 that have not been approved, and they're defective in terms of
18 scope and content.

19 COMMISSIONER CARR: Tech specs?

20 MR. SPESSARD: Well, yeah, the tech spec, you know,
21 governs that program, but the program is deficient in terms of
22 what valves get tested, how those valves get tested, et cetera.

23 The program documents that we have developed to date
24 is the NRC Manual Chapter 0520. We also have program
25 guidelines, as well as sample evaluation plans for each of our

1 areas. Those have been developed, and they are continually
2 revised based on our experience in the field.

3 The actual process now that I'd like to take you
4 through from beginning to end starts really with the selection
5 of the plant, and this really evolves from the discussion at
6 the senior managers' meetings that occur semi-annually. As you
7 well know, the Staff and the Agency managers thoroughly
8 evaluate plant performance at these meetings, and out of those
9 meetings flow recommendations to Mr. Stello, and then he makes
10 a decision in terms of what plant he wants to select.

11 MR. MURLEY: Could I interject here? I think I have
12 to speak up. It's like you might get the flavor that NRR is
13 not involved in all this, but, in fact, we are very deeply
14 involved in it, and Ed and I talk a lot about what plants we
15 think could use an independent look. And so I and my staff are
16 very much involved in the plant, the scope, what things to look
17 for and so forth. So I didn't want you to get the
18 misimpression that we're kind of bystanders, because we're --
19 we have an interest in all this, too, and when it's all said
20 and done, we're the ones that have to take the results and work
21 with it and make sure that the long range is fixed.

22 COMMISSIONER CARR: So these are confirmatory looks
23 on plants you've already got some worry about?

24 MR. MURLEY: Yes. And a lot of times, I have a
25 nagging feeling myself that we're not getting at the real

1 problem, and it always helps, I think, to have the capability
2 for a separate set of eyes and a good fresh look at things, and
3 it's been proved out.

4 COMMISSIONER CARR: And the threshold, then, is where
5 they fit on somebody's trouble list, I assume.

6 MR. MURLEY: Partly, but partly you'll see one plant
7 in here that was not a problem plant at all that we looked at
8 just to kind of calibrate ourselves and find out why they're
9 doing some things good, for example.

10 COMMISSIONER CARR: Well, the purpose of my question:
11 Are we going to use this to kind of get ahead of the problem,
12 so that we can predict who might be in trouble, even though he
13 isn't already?

14 MR. SPESSARD: Sir, that really is our goal.

15 MR. MURLEY: Yes.

16 COMMISSIONER CARR: But if you're only looking at the
17 guys in trouble --

18 MR. MURLEY: No, I think we're trying to --

19 COMMISSIONER CARR: Unless you're just trying to
20 confirm your suspicions. That's different than saying, okay,
21 I'm going to look at everybody.

22 MR. MURLEY: That's right. We don't have the
23 capability --

24 MR. TAYLOR: We don't have the resources to look at
25 everybody.

1 MR. SPESSARD: Right. We don't have the capability
2 to look at everybody, so we have to have some good, substantive
3 basis to decide. As Tom said, we reflect a lot on trying to
4 understand. Clearly we look at -- generally try to look at
5 plants that have done it where we think there will be a payoff
6 to helping that plant improve performance. There was a plant
7 selected for calibration purposes, which you'll hear about.

8 Tom, we -- we mull this heavily among all the
9 managers, Tom obviously has mentioned, and the Regional
10 Administrator is very much a player in this, too, and in all
11 cases, we've had the full support of the Regional Administrator
12 when we've made these selections.

13 But it is -- it will remain as always, since we can't
14 do very many of these, focused to try to go to a plant where we
15 are concerned about performance, but we really don't have good,
16 solid answers on actions, nor are we convinced that the company
17 may have.

18 COMMISSIONER ROGERS: Could I pick up on that. This
19 is a -- the selection of the plants is an outgrowth of the
20 semi-annual discussions that you have?

21 MR. TAYLOR: Usually that's the basis of the
22 selection; yes, sir.

23 COMMISSIONER ROGERS: In that context, this is really
24 a focus on the causes of the problems that you've identified
25 and --

1 MR. TAYLOR: Right.

2 CHAIRMAN ZECH: Can you speak up just a little bit,
3 Jim? I don't think they can hear you in the back.

4 COMMISSIONER ROGERS: Not trying to predict the
5 plants where problems will arise, but identifying plants where
6 problems have come up and trying to explain the cause of the
7 problem.

8 MR. TAYLOR: That's basically what I'd say.

9 MR. MURLEY: Yes.

10 CHAIRMAN ZECH: All right. You may proceed.

11 MR. SPESSARD: Yes, sir.

12 I'm on page 9 of your handout. The evaluation areas
13 covered by diagnostic, as you can see, closely parallel those
14 functional areas of the SALP program, and typically we heavily
15 focus on plant operations and operations interfaces with other
16 organizations such as maintenance, engineering support, et
17 cetera, and I mentioned the strong focus on management and
18 organizational practices.

19 The team planning and preparation process is a very
20 expensive process, and it covers typically six to eight weeks,
21 and I've used that as a timeframe from the beginning of when we
22 get the direction from the EDO to do one. It includes a trip
23 to the site, as well as the Regional Office, in order for us to
24 collect information to begin our preparations, to brief the
25 utilities and Regions in terms of what our process consists of,

1 and then we independently form what I want to call "our
2 regulatory picture," based on all the information that we
3 gather in terms of what the problems have been, what actions a
4 utility has taken in terms of improvement programs, et cetera;
5 actions taken by the Staff in terms of major team efforts and
6 so forth. So we have a good idea going in of what the
7 performance issues have been over time, as well as actions in
8 place to address those.

9 COMMISSIONER CARR: But that's based on these non-
10 independent guys.

11 MR. SPESSARD: It's based on my team.

12 COMMISSIONER CARR: No. It's based on the data that
13 the non-independent people have gathered over the years.

14 MR. SPESSARD: Yes, sir, and I'm going to get to
15 that.

16 In terms of our preparation process, we meet, as Tom
17 Murley said, with NRR as well as the Regions to get their
18 perceptions, so that we have a clear understanding. We want to
19 make sure that we have an understanding of what the NRC senior
20 managers were concerned about when they discussed this plant at
21 the meeting, and from that, we scope out the areas that need
22 evaluation, as well as develop the team itself in terms of the
23 requisite experience and in concert with the degree of
24 independence that we want.

25 COMMISSIONER CARR: Well, that's my question about

1 the independence. Your team goes in with a bias.

2 MR. SPESSARD: No, sir. The team goes in with an
3 understanding. They go in with an open mind.

4 COMMISSIONER CARR: Not if they've already focused on
5 the problems everybody has looked at and formed the team to
6 look at those problems.

7 MR. JORDAN: We want the team to go in as well-
8 informed as they can, but without a bias or predisposition that
9 that's how it must come out.

10 MR. SPESSARD: That's right

11 MR. JORDAN: And that is the strong message that we
12 give to the team. I personally brief the team in advance of
13 their beginning their preparation with that as a goal.

14 COMMISSIONER CARR: My statement is that they would
15 be more independent if you sent them in cold.

16 MR. TAYLOR: Well, Commissioner, the concept is, they
17 certainly ought to be briefed on the problems. They shouldn't
18 be predisposed as to the reasons behind the problem. That's
19 the idea.

20 COMMISSIONER CARR: I guess my question is --

21 MR. TAYLOR: If we sent them in cold --

22 COMMISSIONER CARR: If we already know about the
23 problems, why haven't we fixed them? They're out there looking
24 for problems we don't know about, is what I would have wanted
25 them to do.

1 MR. SPESSARD: We do that.

2 COMMISSIONER CARR: Yes, but they're heavily focused
3 on the ones we already know about.

4 There's no use in arguing. Go ahead.

5 MR. JORDAN: The root cause is the essence of what we
6 want to find and obviously define any other problem areas that
7 have not been flushed out.

8 COMMISSIONER CARR: Okay.

9 MR. JORDAN: And we have, in fact, found in these
10 diagnostic problem areas that were not previously identified.

11 COMMISSIONER CARR: Oh, I'm sure you would. If you
12 look for two weeks, you're bound to find --

13 MR. JORDAN: Yes, sir.

14 MR. MURLEY: Could I make a point, because I think
15 you're on to something really that we shouldn't overemphasize
16 this independence? It really depends on the vast amount of
17 work that goes on before to sift and identify and pinpoint
18 where we want to look. And I would classify it more as an
19 independent look at a problem plant or a plant for whatever
20 reason that we think we don't fully understand.

21 COMMISSIONER CARR: Why don't we call it an outside
22 look by people not involved normally in the day-to-day --

23 MR. MURLEY: That's closer to what it is, yes. More
24 outside, right.

25 COMMISSIONER CARR: "Independence" means to me that

1 this is really a guy going in with nothing and coming out with
2 his own opinion.

3 MR. MURLEY: But if our whole system has missed a
4 real problem plant out there, it's very unlikely that they're
5 even going to find it or, you know, be aimed toward it, much
6 less --

7 COMMISSIONER CARR: Well, they're not going to show
8 up with a list of plants to look at.

9 MR. TAYLOR: Yes.

10 COMMISSIONER ROGERS: Could I just ask just one
11 thing? What do you do in the onsite visit in the preparation
12 phase? What is the nature of that plant visit onsite before
13 you begin the --

14 MR. SPESSARD: We visit the utility first. We tell
15 them they have been selected. And then the purpose really is
16 to go down and meet the management to explain to them the
17 process; you know, there's going to be 19 people show up here
18 and kind of go through the workings of a diagnostic, and then
19 to --

20 COMMISSIONER ROGERS: The logistics of it.

21 MR. SPESSARD: Yes, sir. Set up things like
22 logistics to get a tremendous amount of material from them in
23 terms of their organization, their procedures, things of this
24 sort, because that all is used by our team in getting prepared.

25 It's really that type -- we call it a "bag man" trip,

1 but that's the real purpose of it, and then to visit the
2 Regional Office and talk to a number of the managers and people
3 involved with that plant and get additional information in
4 terms of what the NRC is doing, so that we have a real clear
5 picture of what's going on there.

6 And I know we talked about this going in and being
7 predisposed and so forth, but what we have found is that to be
8 credible, we have to be prepared and we have to be
9 knowledgeable about what we're doing, and we've never just gone
10 in cold turkey, and maybe we'll maybe try that sometime.

11 COMMISSIONER CARR: Oh, I'm not suggesting that.
12 What I'm suggesting is, as Tom says, don't emphasize the
13 independence of this look. It's dependent on a lot of things.

14 MR. SPESSARD: Yes, sir.

15 We develop detailed evaluation plans for each area,
16 and within those plans, there are previously identified what we
17 call performance issues across all areas that we want to better
18 understand to see if those are still there or if they've been
19 fixed, as well as identify new items and then see how they tie
20 together, so we can build a picture. So the preparation is
21 very heavy in that regard.

22 At any rate, the bottom line is that we have a lot of
23 staff involvement in the planning process, and when the team
24 arrives at the site, it's fully prepared and ready to go to
25 work.

1 As far as the onsite evaluation sequence is
2 concerned, this typically covers approximately a four-week
3 area. The team is onsite for usually two weeks. Then we come
4 back to the office where we continue our in-office evaluation
5 in terms of evaluating our results, maybe redefining out plans,
6 et cetera, and then we go out for an additional week to
7 complete our efforts, and then we begin our actual report
8 preparation phase.

9 The onsite process is really what I want to call a
10 four-step process, and I'd like to show you pictorially, if I
11 may -- and I'd like our backup Slide No. 11 for that -- rather
12 than talk about the four things that I have listed there in
13 terms of observing and assessing safety performance at the
14 program level and in the functional areas, I've got a picture
15 of that, which is now being flashed on the screen.

16 We cover our evaluation in four areas, and we work it
17 basically from the bottom up, which is looking at performance
18 issues across the functional areas. We use proven inspection
19 techniques, such as observation of activities, anywhere from
20 training of the shift on EOP implementation, observing shift
21 activities, turnovers, maintenance in progress, testing in
22 progress, et cetera, to identify performance issues at that
23 level.

24 Then we evaluate the licensee's technical programs in
25 terms of their overall quality and effectiveness of

1 implementation. That's our Step 2. We look for strengths as
2 well as weaknesses and problems and how they contribute to the
3 problems that we identified at the Step 1 level of our
4 evaluation.

5 And then at what we call our Level 3, this is where
6 we do our assessment of those management and cultural factors
7 and their contribution to the weaknesses that we've identified
8 at Step 1 or Step 2, and this is where, at this phase, where we
9 use our detailed interviews and our consultants input
10 particularly.

11 And finally we then merge with what we believe to be
12 the root causes of the performance issues that we have found at
13 Step 1 and Step 2, and therefore management's contribution to
14 those issues. To develop this, we have team meetings each
15 night. We have a lot of synergism developed, and the picture
16 begins to emerge after we have been onsite typically about a
17 week.

18 Sometimes in our evaluation process, when we're back
19 in the office, the picture even becomes more clear, because we
20 have so much information to integrate and consider. Our
21 picture changes from time to time.

22 COMMISSIONER ROGERS: Now is this really a sequential
23 process, or are some of these things going on in parallel?

24 MR. SPESSARD: Sir, they are all going on together,
25 and the interview schedule is made when we get there, so we

1 have interviews ongoing, as well as observations. We observe
2 shifts around the clock, for example. And so the way we pull
3 it together is our nightly team meetings. These are quite
4 intensive efforts, and I can assure you that the Staff that
5 does this job really works their tail off when they're out in
6 the field, and it's a tribute to the people that are provided
7 by the Regional Offices as well as the Headquarters Offices.
8 We've had very good people. They're very professional, and
9 they're very dedicated to do one of these.

10 COMMISSIONER CARR: What was the significance of the
11 dotted lines in the pyramid?

12 MR. SPESSARD: Well, my eyes are not -- oh, the
13 dotted lines. What I was trying to show is that we treat each
14 functional area basically the same in terms of our planning
15 process. For example, in Operations or Maintenance, there's a
16 detailed plan, and we look at not only work activities, you
17 know, in each of the functional areas, but also the technical
18 programs within those areas.

19 COMMISSIONER CARR: Yes, I understood that. I just -
20 - when you got to management and organization, it kind of had a
21 dotted line across it instead of the straight lines, and I
22 wondered if that's significant, or it just happened to be the
23 graphics.

24 MR. SPESSARD: Just the graphics.

25 MR. RUBIN: Well, the thought is that there are some

1 management and organizational issues which really align
2 themselves to particular functional areas and can be specific
3 to just one area like engineering support or operations. But
4 there are management and organizational issues that cut across
5 the entire organization.

6 COMMISSIONER CARR: I understand.

7 MR. SPESSARD: The process, when it is done, then we
8 begin to finalize our report. Once we have our report
9 finalized -- and I'll have to admit, we've been trying to
10 perfect this process, because we've done it --

11 CHAIRMAN ZECH: Which slide are you one now, please?

12 MR. SPESSARD: I'm on 12, sir.

13 CHAIRMAN ZECH: Twelve, okay. Thank you.

14 MR. SPESSARD: We've conducted our senior management
15 briefings reasonably early in the process to even later in the
16 process over time to experiment, to see how our performance
17 picture changes, and by an large, it's interesting. We have
18 about a 95 percent good snapshot within about two weeks after
19 we've come back and integrated everything. But our approach
20 now is to try to finalize the report before we have our senior
21 management briefings unless there's something there of really
22 high safety significance that needs upward management
23 attention.

24 Following those briefings, then we meet with the
25 utility and present our findings, and then the report is

1 transmitted by our office to the EDO, and following his review
2 and any other discussions that he needs to have with the Agency
3 senior managers, he then transfers it to the licensee, and at
4 that point the document becomes a public document. Typically,
5 the EDO will require a response within 60 days, and he will
6 also assign staff follow-up actions, and this is via his letter
7 to the office directors involved as well as the affected
8 Regional Administrator.

9 COMMISSIONER CARR: So the exit meeting doesn't
10 really take place on exiting. It takes place a couple or three
11 weeks later.

12 MR. SPESSARD: It's usually four or five, six weeks
13 sometimes.

14 Now I don't want you to get the impression that we
15 don't have interfaces with the utilities when we do this,
16 because we do.

17 COMMISSIONER CARR: But you don't give them an
18 outgoing debrief now.

19 MR. SPESSARD: We keep them apprised of our findings
20 as they occur, but we don't -- they don't have what I want to
21 call the detailed summary evaluation, et cetera, that we
22 present at the exit, because we just -- we haven't pulled it
23 all together yet. It's at a lower level. You know, we might
24 tell them they have a terrible program, you know, for pumps and
25 valves, and here are specific issues. But why that's

1 occurring, what management's contribution to that is, we may
2 not know at that time. It may emerge later.

3 So at the higher level root cause area, that's when
4 that is discussed.

5 CHAIRMAN ZECH: But if you see any significant --
6 have a significant finding that should merit their immediate
7 attention, I presume you take action on that with the utility
8 as soon as possible.

9 MR. SPESSARD: Yes, sir. Those are handled in this
10 way, sir.

11 If we find an immediate safety issue, it's dealt with
12 right there on the spot. It's fully coordinated with the
13 Region. We had a few issues come up that way.

14 If it's an item that violates our requirements and
15 it's evident that it does, we identify that to the utility.
16 Those things appear in our report, and those get staff follow-
17 up actions by the Region.

18 CHAIRMAN ZECH: All right, thank you. You may
19 proceed.

20 MR. SPESSARD: Yes, sir.

21 The results of our effort are now on Slide 13. We
22 conducted three diagnostic evaluations, and we've done one
23 special review at the request of the EDO, and the plants, as
24 well as the dates of our reports, are listed there for your
25 information.

1 COMMISSIONER CARR: What was the difference between
2 the "special" and the "diagnostics?"

3 MR. SPESSARD: Well, it's this way. At the senior
4 manager meeting, Turkey Point was thoroughly discussed, and the
5 view was at that time that Turkey Point should have a
6 diagnostic evaluation. However, the further review of that
7 decision was made by the EDO in consideration that that
8 licensee had been directed by NRC order to conduct an
9 independent management appraisal, which they did. And so the
10 view was that we would do an evaluation of that independent
11 management appraisal to see whether or not that was thorough
12 job, whether or not it identified the root causes of the
13 performance problems, and that the utility now had a very good
14 idea of what it's problems were, so that they could fix them
15 after a long period of time.

16 And so we did a special review of that report. It
17 included the report itself. We did the same type of job that
18 we did for a diagnostic in terms of preparation, in terms of
19 our detailed plan and so forth, and then we interfaced directly
20 over a one-week period with the organization that did that
21 appraisal, to have a good understanding of how they did the
22 job.

23 And then we wrote an evaluation report that did an
24 evaluation of the independent management assessment and
25 transmitted that to the utility.

1 COMMISSIONER CARR: But your inspection covered the
2 same things and was done the same way, then.

3 MR. SPESSARD: Yes, sir, but it didn't involve
4 anything onsite of the utility.

5 MR. TAYLOR: It was an evaluation of the work that
6 the consultant did for the utility, and it was really the
7 agency --

8 COMMISSIONER CARR: But you did all the preparation,
9 but you didn't go and inspect.

10 MR. TAYLOR: That's correct.

11 MR. MURLEY: That's right.

12 COMMISSIONER CARR: Do you think you were able to do
13 a fair evaluation of the management, of the outside reviewer?

14 MR. SPESSARD: Yes, sir, I'd say we did.

15 COMMISSIONER CARR: Then why do you need to go to the
16 plants at all?

17 MR. SPESSARD: Well, all plants have independent
18 management assessments.

19 COMMISSIONER CARR: Well, but I mean, you had to have
20 something to compare that to, and you didn't have your basic --

21 MR. SPESSARD: But we did. We did everything that we
22 would normally do, because we really --

23 COMMISSIONER CARR: Except go to the plant.

24 MR. SPESSARD: Right. We really didn't know whether
25 we were going to do a diagnostic evaluation. That decision

1 rested on what we found. We were prepared to go. The team was
2 ready to go.

3 COMMISSIONER CARR: I understand that.

4 MR. SPESSARD: But what we determined was, is that
5 that assessment was effective. It laid out what the root cause
6 of their performance problems were. It provided sound
7 recommendations to address those root causes.

8 COMMISSIONER CARR: However, my question is, how do
9 you know that, if you haven't been to the plant?

10 MR. SPESSARD: Well, we determined that in comparison
11 with what we believed, based on our preparations, the
12 historical data, what we thought --

13 COMMISSIONER CARR: Maybe I'm not getting through to
14 you. If you can do that, if you can determine that without
15 going to the plant, then why do we need to go to the plant on
16 the other inspections?

17 MR. JORDAN: Maybe I can help.

18 COMMISSIONER CARR: Okay. Help.

19 MR. JORDAN: They used the consultants' basic
20 findings, their detailed findings, to understand whether the
21 analysis that the consultant provided to the utility was
22 sufficiently thorough and detailed and covered the right areas.
23 So they used the basic information that the --

24 COMMISSIONER CARR: But you couldn't be sure they
25 missed -- you missed --

1 MR. MURLEY; No. You're exactly right. It had to be
2 consistent with all the thousands of hours that we'd spent
3 there before with the rest of our inspectors, both from
4 Headquarters and from the Region. And based on that background
5 of knowledge, we felt that the consultant had hit the right
6 things and that we didn't need to go back there with a separate
7 team. That was basically our thinking.

8 MR. TAYLOR: Yes. It was a pragmatic decision that
9 this effort had gone -- had been underway by this outside group
10 at the utility. We knew a great deal about the utility, and so
11 the EDO made a decision that rather than after that,
12 superimpose the full extent of the diagnostic, we build out of
13 what this independent consultant could see, and it really was a
14 tailormade situation.

15 COMMISSIONER CARR: I was trying to calibrate the --
16 no pun intended, right?

17 MR. TAYLOR: Right.

18 COMMISSIONER CARR: I was trying to calibrate the
19 consultant.

20 MR. TAYLOR; I understand.

21 COMMISSIONER CARR: And you can't really do that with
22 what we've done.

23 MR. TAYLOR: No, no.

24 COMMISSIONER CARR: Okay.

25 CHAIRMAN ZECH: You may proceed, then.

1 MR. TAYLOR: It provided another review of what had
2 happened. That's really what it was intended to do.

3 MR. SPESSARD: I'm on Slide 14, sir.

4 I wanted to talk about some of the results to date in
5 general terms, and I'll talk about the root causes of
6 performance problems that we have seen, and these are just
7 typical. There are others.

8 The first one, the plant that we had evaluated had
9 been neglected in favor of other priorities by utility
10 management. Examples of this might be, the focus was on
11 completing new plants and leaving the older operating plants
12 alone, or focusing on such things as TMI Action Items and
13 completing those as opposed to other performance issues at the
14 plant.

15 A fossil plant attitude, this was typical in terms of
16 seeing Band-Aid fixes, running equipment until it breaks, or an
17 emphasis on short-term availability as opposed to long-term
18 reliability.

19 COMMISSIONER CARR: We use that term a lot, and I
20 have yet to visit a fossil plant. I think I'd better do that.
21 I'm not sure they're running their fossil plants like that.

22 MR. SPESSARD: They may have changed.

23 COMMISSIONER CARR: We assume that the fossil plants
24 are -- I mean, I don't want to give those fossil plants a bad
25 name if they don't rate it.

1 MR. TAYLOR: Maybe some of us will go with you on
2 that.

3 COMMISSIONER CARR: Okay. I'm going to do that.

4 MR. MURLEY: There's a plant in Queens.

5 MR. TAYLOR: We need to be calibrated, is your point.

6 MR. SPESSARD: And the other one was the lack of
7 clear performance goals. To a large degree, we have seen this
8 at all plants visited, and it was evident over time. Some
9 plants, this was a bitter problem than at others.

10 Ineffective planning for operations and a lack of
11 operating experience, lack of attention to human relations
12 matters and corporate micromanagement. Those are a few of the
13 root causes of the performance issues that we have observed.

14 COMMISSIONER CARR: I had a little problem with the
15 bottom one and the top one. What you're saying is, they can be
16 too involved, or they can be not involved enough.

17 MR. SPESSARD: Yes, sir. It can work both ways.

18 MR. JORDAN: That wasn't the same plant, by the way.

19 MR. SPESSARD: In terms of performance strengths that
20 we have seen or improvements, we mentioned earlier that we did
21 visit a good performance plant, and we were sent to that plant
22 in an effort that we would be calibrated, and so we did visit
23 the good plant, and that was the principal reason for going,
24 although at the same time we recognized there were performance
25 issues that didn't exactly match their reputation.

1 But in terms of strengths that we've observed,
2 clearly corporate leadership, oversight, and involvement is a
3 clear strength of that particular plant.

4 Integrated performance plans, these flow directly
5 from a strategic plan from the Board and then to -- some people
6 call them company business plans, and then right down to
7 division level plans that establish goals and measures for
8 feedback, et cetera.

9 Technical staff capabilities, in this area one
10 organization that we visited, clearly a strength in terms of
11 the corporate support and engineering function in terms of
12 capability.

13 Positive management and staff attitude toward safety,
14 managerial and organizational changes, and the latter ones I'm
15 talking now are improvement areas. One of the things that has
16 become evident to us as we visit a plant that has been in
17 trouble is that to get out of trouble, it takes a significant
18 effort to bring in new managers, reshape the organization, new
19 policies, et cetera.

20 Improved programs for engineering support and then a
21 reduction in contaminated areas.

22 CHAIRMAN ZECH: Could you tell us which plant was the
23 good plant that you got that information from?

24 COMMISSIONER CARR: That's over on the other page.

25 CHAIRMAN ZECH: Okay, thank you.

1 MR. JORDAN: These performance strengths, some of
2 them were among some of the other plants. So this is a
3 sampling of strengths.

4 MR. SPESSARD: This is a composite.

5 MR. JORDAN: Some of which were seen at other plants
6 that had poor features.

7 CHAIRMAN ZECH: All right.

8 MR. SPESSARD: In terms of performance weaknesses,
9 strained resources, and by this I mean basically the poor
10 performing plants have more work than they have staff capable
11 of doing that work in certain areas -- organizational
12 instability.

13 COMMISSIONER ROGERS: Excuse me. On that, just when
14 you saw something like that, do you think that was just a lack
15 of overall resources or a lack of appropriate priority?

16 MR. SPESSARD: I believe it would be a combination of
17 both. For example, you might see a number of improvement
18 programs in place, but they're very fragmented. They haven't
19 been integrated at all. They haven't been man-loaded. And
20 what you find is, they're trying to operate the plant, and
21 they're also trying to improve themselves through these massive
22 programs, and the staff is just not capable in a typical sense
23 of handling both. And so they have to better manage and focus
24 their resources to do that.

25 And I might add, when these issues have been

1 identified to the utility and their responses back to the EDO,
2 they have been very responsive in their answer back in terms of
3 how they are addressing these issues. And in many cases, it is
4 to better integrate their programs, provide additional
5 resources where resources are needed, and maybe better
6 management of those resources through hiring new managers, et
7 cetera.

8 Communications problems, ineffective engineering
9 support. Rather than going through this entire list, if
10 there's any particular one that you see that you might be
11 interested in and ask a question on, I'd be more than happy to
12 do that. Otherwise, I'll move on.

13 MR. JORDAN: Why don't you go through inadequate
14 motor-operated valve maintenance?

15 MR. SPESSARD: Motor-operated valve maintenance? I
16 mentioned that we assessed each functional area, and
17 maintenance certainly is one of them, and for each of the
18 plants that we have done a diagnostic evaluation on, we have
19 identified MOV problems, whether it be programmatic in nature
20 in terms of how good the PM program is, or even if they have
21 one in terms of how they inspect, test, how they maintain it,
22 the type of grease they use, how they control their torque
23 switches, limit switches, et cetera, each plant that we have
24 been to had problems in that area, and that has prompted, as
25 you will see later, a generic staff action on that issue.

1 COMMISSIONER ROGERS: On the operator overtime safety
2 issue, what did you pick up there? How did you identify that?
3 What criteria, measurements?

4 MR. SPESSARD: Okay. We identified that through a
5 combination of things: one, the observation of the shift
6 activities and complement, and then actual records of who
7 worked when, and it was a chronic issue of operators working in
8 excess of the time that's permitted via an administrative
9 directive that's implemented through the technical
10 specifications. But the issue that we found at the time -- and
11 I don't remember exactly how many back-to-back shifts this
12 individual worked, but it was something like on the order of
13 six or seven or something like that -- well in excess, and that
14 individual was due to start the plant up that day, and so they
15 had to remove him from duty. And that was an immediate safety
16 issue which we turned over to the Region.

17 I mentioned earlier, in addition to plant-specific
18 performance issues, we sometimes see what we view to be generic
19 issues, and these are handled either on a generic basis or a
20 plant-specific basis by the EDO in terms of letters to the
21 Office Directors and the Regional Administrator.

22 Typically, he asks for a response within 30 days and
23 then an update at six-month intervals until the issues are
24 closed, and he also tracks them with his own system.

25 But typical generic actions, one is the approval of

1 the licensee's in-service testing programs for pumps and
2 valves.

3 We were requested to evaluate the industry responses
4 to check valve failures, and I'm sure you know there's a
5 generic communication out on that already. That's a recent --
6 but that came out of this recommendation.

7 We have internally within AEOD right now the
8 evaluation of common mode failure of auxiliary feedwater pumps,
9 and that's a review that the other division within AEOD is
10 currently evaluating. And then the evaluation of the MOV
11 maintenance programs themselves.

12 As far as plant-specific actions are concerned, they
13 are handled, you know, on a specific basis, either by the
14 office or the Region that has been assigned.

15 In conclusion, which is covered on your last two
16 slides, I would like to say that the effectiveness of this
17 program, its success depends very heavily on intensive
18 preparation, an experienced team, and good team communications.
19 We must be credible if we're going to be effective.

20 COMMISSIONER CARR: Along that line, on those
21 experience -- I guess you get your experience in plant
22 management from those two consultants?

23 MR. SPESSARD: We get the experience in terms of
24 assessment of management and organizational effectiveness and
25 in terms of the impact of their actions on the culture, et

1 cetera; yes, sir. We use that expertise.

2 COMMISSIONER CARR: I'm curious to know what those
3 two guys have managed. Would you mind sending me their resumes
4 or whatever?

5 MR. SPESSARD: Yes, sir.

6 COMMISSIONER CARR: Thank you.

7 MR. SPESSARD: Now I would like to point out that I
8 and my other managers and team leaders interface very heavily
9 with them and bring to bear, if you will, our experience in
10 dealing with issues at these plants.

11 The management and organizational culture evaluations
12 clearly enhance our assessment of root cause, and I think the
13 most important thing is that our root cause determinations
14 improve our understanding of the performance problems, and
15 therefore the likelihood for improvement in terms of the
16 actions that are presently in place or planned by the utility
17 at that time, and then whether or not additional action on the
18 part of NRC is needed. And so I view that as a proactive
19 effort on our part to make sure that we can head off problems
20 down the road based on what we see.

21 The diagnostic evaluations have generally confirmed
22 that Agency's senior managers' performance picture, that they
23 actually obtained during the senior managers' meetings and all
24 of the data that they evaluated, as well as the perspectives
25 that they offered when they evaluated that information. And so

1 we have generally confirmed what they believed.

2 And lastly, the evaluations have been well-received
3 by the utilities, as well as the Agency's senior managers. I
4 believe that our efforts to date have contributed to the
5 licensees' development of their action plans, that they have
6 put in place or are putting in place in terms of responding to
7 their performance problems, and that as we look at the PI data,
8 performance indicator data, or other measures that the Staff
9 has, particularly for the first two plants that we visited, and
10 it's at least a year since then, we've seen the performance has
11 improved, and therefore I believe that the safety has been
12 enhanced on a plant-specific basis as a result of these
13 evaluations, as well as on a generic basis through Staff
14 actions.

15 That's all I have. Thank you very much.

16 CHAIRMAN ZECH: All right. Thank you very much.
17 Questions from my fellow Commissioners?

18 Commissioner Roberts?

19 COMMISSIONER ROBERTS: No.

20 CHAIRMAN ZECH: Commissioner Carr?

21 COMMISSIONER CARR: I've got in a lot of mine, but
22 that last chart raised one more.

23 If the performance evaluations have confirmed what we
24 already suspected, and if Turkey Point solved their problem by
25 hiring their own guy, why don't we require them to do it for

1 themselves instead of us trying to go out and do it for them?

2 MR. JORDAN: I guess I would try to answer that with,
3 although we say we have confirmed -- we confirm in a general
4 sense, but the findings are deeper and broader in each case.
5 We've extended the view that the Agency has of the performance
6 of each of these plants, and we've gotten a new understanding
7 of what the root cause is.

8 COMMISSIONER CARR: But so did Turkey Point.

9 MR. JORDAN: And so we did find in the case of Turkey
10 Point that the contractor had done a sufficient amount of work
11 that the Agency did not need to repeat their effort. But we
12 also found that the contractor had not fully communicated his
13 findings to the utility, that they had held back by focusing on
14 certain issues and had failed to provide a sufficiently
15 complete picture to allow the utility to have a high
16 probability of solving all of his problems.

17 So it was a beneficial review on our part. It
18 certainly did save NRC resources to have the utility have a
19 consultant do the work and then us follow up on it, and I
20 believe that it's a matter of policy choice, what combination
21 of tools one applies in that case.

22 COMMISSIONER CARR: Okay. And on the idea that they
23 well-received all these inspections and given us all good
24 comments, you wouldn't expect anything else, would you? I've
25 never been on an inspection where the guy didn't say, really,

1 "Thanks for coming. We've learned a lot, and it's been great,"
2 you know -- not like "I'll punch you in the eye as you leave."

3 [Laughter.]

4 MR. JORDAN: No, sir. We have licensees that feel
5 very strongly about their own programs, and one of those was
6 reviewed during this particular process. And the point of
7 credibility is that your findings are technically strong and
8 correct and that the utility agrees that those are defects that
9 need to be fixed.

10 In the process itself, there were substantial
11 discussions and even arguments over the details as they went
12 along, but when the process was completed, the utility has
13 advised us -- and I'll be interested in the follow-up that the
14 ACRS is going to do -- the utility has advised us that, "Yes,
15 we learned things about ourselves that we didn't know and
16 couldn't find out in our normal process."

17 MR. TAYLOR: I might add that my comments about the
18 EDOs, you're right, at the exit. I went to the exit at Fermi,
19 and there are always polite and nice comments made. But on one
20 or two of these, the EDO has had calls from people who are
21 usually very blunt with him, from the management of the
22 licensees' companies, and part of the comments I made at the
23 beginning were from those blunt calls, rather than the normal
24 courtesies.

25 COMMISSIONER CARR: Well, having said all I've said,

1 I think these inspections are probably the best inspections we
2 give. I think we're doing too many inspections. For instance,
3 the SSFIs cover most of the same issues or certainly all of
4 them in a certain area. You cut those right across the board;
5 you just take a slice through it, it looks like.

6 I get the feeling we may be over-inspecting when we
7 can do it all with one inspection, and I think that this
8 inspection is a good idea. I would like to just give it to
9 everybody and knock off some of the other inspections.

10 MR. JORDAN: Maybe we didn't --

11 MR. SPESSARD: Could I respond to that?

12 MR. JORDAN: Okay, go ahead.

13 MR. SPESSARD: The SSFI, we used SSFI techniques
14 sometimes. When we did Fermi, we needed to evaluate
15 engineering, but we did not do what I will call our SSFI
16 technique at Fermi, because that was already scheduled by the
17 Regional Office to occur, in fact, this month, and we
18 communicated with that team.

19 So when we evaluated engineering support, we stayed
20 out of the hard engineering look in terms of calculations, et
21 cetera, and we stayed on a higher level of performance and
22 tried to look at issues to see how they integrated with broader
23 issues across the board.

24 So when we do plan one of these and when we work with
25 the Regions and we work with Headquarters, we're very concerned

1 about what's been done, and that's part of our detailed
2 process.

3 COMMISSIONER CARR: I think you're making my point,
4 if I could extend. If we can only do one a year instead of
5 having three or four different teams show up at various times
6 during the year -- we've got SALPs and SSFIs, and we've got the
7 Regions inspecting, and we're onsite inspecting. The guy can
8 turn around and have an inspection every time he looks.

9 If you can get this kind of data and get a good look
10 overall, it looks like it would be good to force our resources
11 into one inspection and do a thorough one across the board and
12 look at all of them more often, perhaps.

13 I offer you that suggestion.

14 MR. JORDAN: We haven't conveyed to you the
15 resources. We did describe the time. This is a three to four
16 FTE effort by senior NRC people. These are senior residents
17 that have been put on the team, senior training people from the
18 office. We have two SES managers who are leading it. So it's
19 a very expensive program that we're putting on.

20 COMMISSIONER CARR: But it's a very valuable look.

21 MR. JORDAN: Yes. But it's costly.

22 COMMISSIONER CARR: That's what we're here for, is to
23 improve safety, and I'm not sure that you don't do it better by
24 this particular inspection, if you really came away with a good
25 idea of what they look like across the board than if we go in

1 and nickel and dime them to death.

2 CHAIRMAN ZECH: All right. Thank you.

3 Commissioner Rogers?

4 COMMISSIONER ROGERS: Well, somewhat along those
5 lines, maybe just from a little different point of view,
6 though, I think there is a major resource question here that
7 has to be looked at with respect to inspections in general,
8 this type and all the others.

9 The thought just --

10 COMMISSIONER CARR: I didn't mention the maintenance
11 inspections which we're doing, too.

12 COMMISSIONER ROGERS: Yes. The thought occurs to me,
13 what can you say about the deficiencies in our inspection
14 process that leads to the necessity for such an approach as
15 another way of looking at that?

16 I mean, Commissioner Carr said, well, why not get rid
17 of some of the others and do this? Well, what does this tell
18 you, if this is so effective and so good, about what's missing
19 in what we've been doing with all the other inspection
20 processes that we have? What's missing in our whole procedure
21 that leads us to conclude that we need to do this?

22 It seems to me that we do have to address this
23 question of inspections. There just seem to be an awful lot of
24 them, a lot of manpower, a lot of time on our part, on the
25 licensee's part, and the question that was raised -- why can't

1 the licensees do this themselves?

2 After all, they can hire consultants to come in and
3 take a look at them, frank opinions. What's missing in what
4 we've been doing so far that requires us to take this step?

5 MR. TAYLOR: Sir, we've struggled with this question
6 for many years in the inspection process, dating back to my
7 previous jobs of what are the most effective inspection
8 techniques and processes. Some of the inspections that you've
9 mentioned go very deeply into a specific functional area and
10 remain highly technically focused on that specific area. You
11 mentioned SSFI, safety system functional inspections -- highly
12 focused on design, design process control, change, preservation
13 of system, safety system capability, and it takes -- that's a
14 very specialized effort.

15 You could integrate some of that totally, immerse it
16 in one of these broad inspections, but it's, I think -- Tom, of
17 course, is here, and he's now got the whole inspection process
18 under him, but I think it's been a struggle for a long time.

19 We used to have what we called the performance
20 appraisal team inspection years ago, which grew out of some of
21 the TMI experience of trying to put all the pieces together.

22 COMMISSIONER ROGERS: Well, my question is not a
23 critical one.

24 MR. TAYLOR: No, I understand.

25 COMMISSIONER ROGERS: It's one that, what can we

1 learn here from this whole process?

2 MR. TAYLOR: We've struggled with specialized area
3 inspections. We've struggled with the concerns where we see a
4 broader issue of performance. If a utility is performing
5 reasonably well except for some specialized areas, then we
6 focus on those areas, and we have found in numbers of
7 utilities, that's one of the reasons that these safety system
8 functional inspections were conceived, was that the control of
9 engineering work and the control of preservation of the design
10 has been weakened at a number of utilities. So that's why that
11 program -- it really grew out of the Davis-Besse experience.
12 That's how it got started.

13 MR. MURLEY: Let me try to answer it from my
14 perspective. In a way, this sits on top of a vast amount of
15 information that we do get, and we can't be a priori smart
16 enough to know which plants to pick and what to look at. So
17 what they do depends on a lot of information.

18 Now why can't we do more diagnostic inspections?
19 Probably we could. I'll give you some examples.

20 COMMISSIONER CARR: And the corollary, less others.

21 MR. MURLEY: And less others.

22 COMMISSIONER CARR: Not just throwing more of them
23 out there.

24 MR. MURLEY: But I go back to my experience in Region
25 I where we, for some time, knew there were problems at Pilgrim

1 and at Peach Bottom. And how did we know that? Well, because
2 a health physics inspection would come back, and they'd show
3 this problem. And an SSFI or a host of specialist inspections,
4 not to mention the monthly reports from our resident
5 inspectors. And it's when we pulled all of that together as
6 part of our SALP process that we asked ourselves: Something's
7 wrong there that we're not getting at. And I put together in
8 the Region some diagnostic inspections.

9 Now we've got nationwide, really, a different
10 mechanism, and the EDO has decided to have kind of a different
11 mechanism, which is Ed Jordan's people, but we have to
12 understand, they could really only amount two or three or how
13 many a year -- not a lot. And I don't think it's practical to
14 think that you can supplant all this mass of information that
15 comes in to you with just a few directed diagnostic
16 inspections.

17 I think we ought to go back and take a look, and I
18 want to talk with Jim and Vic, and maybe we could be doing more
19 of these. But we're still going to have to do the specialist
20 inspections, the HP inspections, the fire protection and those
21 sorts of inspections that the Regions do all the time and we
22 mount here also from time to time.

23 COMMISSIONER CARR: Well, your -- excuse me -- your
24 instruction says that a diagnostic evaluation is not an
25 inspection. I quote.

1 MR. TAYLOR: It's more than an inspection.

2 COMMISSIONER CARR: It says: "Therefore DET's
3 evaluations are outside the scope of existing agreements
4 between states and the NRC involving state representation on
5 NRC inspection activities."

6 MR. SPESSARD: Yes, sir.

7 COMMISSIONER CARR: It sounds awful like an
8 inspection. It smells like an inspection; it looks like an
9 inspection. But it's an evaluation?

10 MR. SPESSARD: Yes, sir.

11 COMMISSIONER CARR: Okay.

12 MR. SPESSARD: It's performance-based as opposed to
13 being concerned about necessarily rules and regulations, in
14 which we're trying to identify what the performance issues are
15 and the root causes for those performance issues, and we work
16 directly for the EDO, and therefore until such time as he's
17 satisfied with the job the team has done, that information is
18 considered pre-decisional. You find all kinds of opinions;
19 hopefully they're supported, based on what we found. But it's
20 different.

21 COMMISSIONER CARR: Let me go back. I think it's a
22 good inspection.

23 CHAIRMAN ZECH: Thank you. Commissioner Rogers?

24 COMMISSIONER ROGERS: What have you learned about
25 performance indicators through this? Is it helpful in your

1 project to develop performance indicators? Do these exercises
2 so far tend to give you any helpful information with respect to
3 that question?

4 MR. JORDAN: There has not been a direct feedback.
5 We have looked at the utilities in terms of once they
6 understand their problems, if they have internally a set of
7 objectives, a review process that will help them see that
8 they're improving, but those are very specialized and unique to
9 their particular problems.

10 The general performance indicators that the NRC has
11 adopted have given us a clue in most of these plant cases that
12 they were not a high performer, but have not been definitive to
13 say that they were the poorest.

14 COMMISSIONER ROGERS: Okay. The other question
15 really has to do with this process and its relationship to the
16 SALPs. After you do one of these, does that modify your SALP
17 schedule? I mean, this is a pretty thorough look at a plant.
18 Do you keep the previous SALP schedule, or do you readjust
19 that?

20 MR. JORDAN: They have been readjusted a little, but
21 this information becomes an input to the next SALP. So that
22 report and the Staff are used as an input.

23 COMMISSIONER ROGERS: For example, if you decide to
24 do one of these and you do it, and there is a SALP scheduled,
25 let's say, six months later, would that take place at the

1 scheduled time? Would that come right on the heels of the --

2 MR. JORDAN: Only slight adjustment.

3 MR. SPESSARD: So far as I know, there's been no
4 shift in schedules, sir, but I'm not sure.

5 COMMISSIONER ROGERS: Would that be worth looking at?

6 COMMISSIONER CARR: They haven't thought about it.

7 MR. MURLEY: No, we've thought about it in the sense
8 that this cannot supplant a SALP, in my judgment. All it can
9 do is --

10 COMMISSIONER ROGERS: It's not intended to.

11 MR. MURLEY: -- add input to it. It's nowhere near
12 as broad as the things that go into a SALP evaluation. In my
13 judgment, it's meant to look very deeply at some suspected
14 areas of problems, and it brings to bear a different set of
15 skills generally, looking at management things. Not that the
16 Regions don't normally do that, but it's just a different look
17 at the problem.

18 COMMISSIONER ROGERS: So I guess what you're saying
19 is that each of the -- the agenda for each of these is really
20 tailored to the particular plant, whereas the SALP is a
21 standardized set of --

22 MR. MURLEY: Yes.

23 MR. JORDAN: We thus far haven't looked at emergency
24 preparedness or security or fire protection as functional
25 areas, for instance, in the reviews, and those are important in

1 the overall SALP process.

2 COMMISSIONER ROGERS: Well, what is your intent with
3 respect to following up in a longitudinal way, the outcomes of
4 these? You don't have to have an immediate response, but is
5 there any way of tracking out on a longer-term basis how
6 effective this process has been, or is it too early to measure
7 any of the ones you've done so far?

8 MR. JORDAN: In the management meetings, there are a
9 part of the discussions that those plants have had a
10 diagnostic, we're following them up to see that, in fact,
11 improvements are continuing to occur, and the Region is
12 following up on the commitments the utility made as a result of
13 the correspondence from EDO. So there is a clear follow-up.

14 MR. MURLEY: Now we get tasked by the EDO, and in
15 addition, clearly these plants that are on this list generally
16 are plants that we've followed for a long time.

17 COMMISSIONER ROGERS: Well, I hope also that we're
18 looking, as we do this, at any problems that our own procedures
19 and actions have taken or contributed to, so that we can
20 adjust. I mean, we're in a learning process as well, I would
21 see, on this.

22 MR. MURLEY: In that sense, it is, I think, a useful
23 quality assurance function. One can look at it that way. It's
24 for the EDO's benefit. I mean, if there are things that we in
25 NRR are not doing well or the Regions may be -- maybe there's a

1 bias someplace in the system. That's useful to find and to
2 know also.

3 So I support these very much.

4 MR. TAYLOR: That's why there are separate memos to
5 the offices or Region affected.

6 CHAIRMAN ZECH: Commissioner Curtiss?

7 COMMISSIONER CURTISS: I just have on quick question.
8 Could you comment just briefly or contrast what we do here with
9 what INPO does in site visits, and in particular maybe one
10 that's similar to what they did at Peach Bottom? What do we
11 get as an agency in this context beyond the INPO evaluation,
12 and what does a utility get from our evaluation that they don't
13 get from an INPO evaluation?

14 MR. JORDAN: Okay. We have, in fact, been almost
15 back to back on two of them with INPO evaluations, and they
16 turn out to be complementary. We don't have an input into what
17 INPO reviews in advance, and so we really do go in with our
18 separate agendas. The results that we have seen have, though,
19 been generally complementary, that the utility has been able to
20 say afterwards that the results from the INPO finding and the
21 NRC finding fit together; they weren't contradictory.

22 But the scope of these is somewhat different than the
23 INPO -- most of the INPO papers. The root cause side of it is,
24 in our view, stronger in this program. The INPO, in terms of
25 being beneficial to the utility, their aimed at helping

1 utilities self-improve, and perhaps we're more critical in that
2 than the INPO findings are.

3 MR. TAYLOR: We haven't had INPO observe one of these
4 yet, have we?

5 MR. JORDAN: No, we have not.

6 COMMISSIONER CARR: Does your team read the last INPO
7 visit before they go up?

8 MR. SPESSARD: They're available.

9 COMMISSIONER CARR: They're available?

10 MR. JORDAN: Yes.

11 COMMISSIONER CARR: Do you read it after you publish
12 your findings in those similar cases?

13 MR. JORDAN: We have, yes.

14 COMMISSIONER CARR: It looks like you're missing a
15 bet, if you don't prepare your team to at least pass through
16 that.

17 MR. JORDAN: The timing has been not advantageous
18 thus far for an immediately past INPO visit. We've been
19 curiously linked up in time, so that we're only months apart.

20 COMMISSIONER CARR: That doesn't mean their findings
21 -- it's nice to at least know what their findings were at the
22 last visit before you go in.

23 MR. JORDAN: Yes. We will do that. Thank you.

24 CHAIRMAN ZECH: Anything else, Commissioner Curtiss?

25 COMMISSIONER CURTISS: No.

1 CHAIRMAN ZECH: Well, let me just make several
2 comments.

3 First of all, I think this is an excellent program.
4 It focuses on operational safety and operational performance
5 that focuses on safety, in my view, and public health and
6 safety is our business, so I think it's an excellent tool.

7 It also involves both NRR and AEOD and others, as
8 we've been told this morning, and therefore, I think, has a
9 great deal of value.

10 I agree with Commissioner Carr, though, when he
11 suggests that perhaps we ought to review our overall inspection
12 programs as the integrate with each other. Maybe the Staff
13 should take a good look at that. I recognize there are
14 different focuses for the different inspections, but I think it
15 would probably be useful to take a look and see -- at all the
16 inspections we're doing and ensure that we are focusing our
17 resources properly.

18 I do think it's important to point out, though, in my
19 judgment, even though we've talked about a lot of inspections,
20 it sounds like we're really inspecting everything to a great
21 extent. It's my judgment that we're really not doing that. We
22 are only inspecting kind of a small percentage of the plant's
23 performance in many ways, and certainly in detail only a small
24 percentage. We only audit certain things, as you know. We do
25 count on the utility to provide us with a lot of information,

1 and we cannot and do not manage the utility across the board.
2 They do that. It's their responsibility to operate, maintain
3 the plant in a safe manner.

4 So we -- I'd like to think we do a lot more
5 inspections than we do, but I'm convinced that we really only
6 do a small percentage of what I'd say is real in-depth
7 inspections. So that's why I think this is such a valuable
8 program, because it does at least focus on those plants in
9 those areas that we have some concern about.

10 I think the process is very useful. I recognize what
11 you're saying here is that you get to -- your senior management
12 gets together, including the Regional Administrators, and have
13 discussions about the plants that you may have some concerns
14 about but haven't been able to pin down specific areas, and
15 therefore you want to take a good look to see where there may
16 be regulatory or safety concerns. And I think that process, I
17 think, is very valuable itself.

18 Management involvement, in my judgment, in my
19 experience, is perhaps -- if there's any key to success in this
20 nuclear power industry, it seems to me it is management
21 involvement, and that means -- a good example of that is root
22 cause analysis.

23 Your root cause analysis, how do they do it? For
24 example, is corporate management involved or not? Those plants
25 that I've visited that have a good root cause analysis system,

1 they might use a system such like this: If a problem occurs,
2 they get all the corporate people together, the senior people,
3 not only the plant manager and say, well, fix that problem,
4 because you obviously need new equipment or something, but they
5 get the people together and they say, all right, trainer, what
6 can you do to fix the problem? Maintenance, what can you do?
7 Outage manager, what can you do? Operations, what can you do?
8 The engineering support, what can you do? In other words, how
9 can each of you -- what could you have done to prevent that
10 problem?

11 To me, when management is involved to that extent
12 with a good root cause analysis program, it involves all of
13 corporate management, and to me, that's a management type
14 challenge, and there are many utilities out there that do have
15 excellent programs in this regard. Others, I think, could
16 improve in their root cause analysis. But management
17 involvement is truly a key, and I think you're looking at the
18 safety performance and our regulatory responsibilities, and
19 then attempting to see how these utilities can improve is an
20 excellent way to go about carrying out our responsibilities.

21 For example, too, another quick example is
22 performance improvement programs. Now I've visited a lot of
23 plants. I've heard utilities tell me about performance
24 improvement programs, and they always sound like they're going
25 to really fix all the problems at the plant. And my first

1 question usually is: Well, it seems to me, didn't you have a
2 performance improvement program in the past? And the answer
3 usually is yes. And then my next question is: Well, why
4 didn't it work? Why are you having a new one?

5 If there's a good reason, perhaps that's acceptable.
6 Many times, in my judgment, they just fix the performance
7 improvement program or they replace it with a new one. That,
8 to me, is not necessarily good management. Why didn't the
9 first one work? Why do you need a new one? Why do you think
10 the new one is going to work if the other one didn't?

11 Those are the questions that management, in my
12 judgment, should be asking itself. You're looking for results
13 from improvement programs. What part of an improvement program
14 really did work? What part didn't work? Why didn't it work?
15 What can you do to make it work? Those are the kind of
16 management questions that, in my judgment, utilities should be
17 asking themselves, that part -- and they bear directly, in my
18 judgment, on operational safety, operational performance.

19 It's my understanding that this diagnostic inspection
20 would look at those kinds of things and perhaps would be able
21 to point out to management areas that they can improve in. So
22 in that regard, I think it's a very valuable, very valuable
23 initiative.

24 I think, too, of perhaps as much value as anything is
25 it is a proactive program. It's looking at utilities that we

1 don't fully understand, perhaps, why they're not doing as well
2 as it looks like they should be doing, and therefore we make an
3 effort to find out. And what we're doing -- at least, I
4 believe what we're doing -- is trying to be proactive. We're
5 trying to -- we're trying to say, before an event happens,
6 before the problem is significant, the problem might occur,
7 we're trying to say, you know, why is it that this plant is not
8 doing as well as it should, and if we can point out areas that
9 need attention, then perhaps -- and we'll never know, of
10 course, but perhaps if we see improvement, then we will have
11 prevented a potential significant event.

12 This, to me, is maybe one of the most valuable things
13 we can do. We don't have a crystal ball. It's very difficult
14 for us to try to look ahead, but hindsight is always -- is
15 always a wonderful way to analyze things. But looking ahead is
16 very difficult. And that's the effort, of course, of the
17 performance improvement program.

18 I know it's just maturing; it's just really getting
19 started. It's going to take several more years for it to be,
20 you know, more valuable than it is. I think it's still only a
21 tool and always will be, but I do think that that's an effort
22 to look ahead, to try to prevent casualties, and I think that's
23 a significant obligation, a responsibility on our part, because
24 it impacts directly on safety.

25 So those are the kind of things I think this

1 diagnostic program is intended to address, and for that reason,
2 I think it's very, very useful, especially the effort, at
3 least, to try to be proactive and to look ahead and to try to
4 prevent problems. So for that reason, I think it's extremely
5 useful.

6 I also appreciate the fact that it has generic
7 implications, as you addressed briefly, because there are
8 lessons learned here from your certain -- from these diagnostic
9 inspections that can apply generically. They can apply to
10 other plants, and even though we have so many custom-built
11 plants in our country, we do, indeed, have generic applications
12 for safety and performance.

13 And whereas you find something in one of these
14 inspections that could be useful at some other plant, I think
15 that's extremely valuable, because they do have many things in
16 common, even though they have many differences. So for that
17 reason, generically, I think the diagnostic inspections are
18 very useful.

19 And so for all these reasons -- and I recognize this
20 isn't an end-all to your inspection program -- I do recommend
21 that you take a look to see, perhaps, stepping back where our
22 overall inspection program can be integrated or perhaps reduced
23 in certain areas or improved in other areas, but I personally
24 don't think we're over-inspecting. I do think we should use
25 our resources as best we can and make as significant a

1 contribution to safety and performance as we possibly can, but
2 I think this diagnostic program is extremely useful.

3 I commend the Staff for their efforts. I think the
4 process itself is valuable in their attempt to look ahead,
5 their attempt to use foresight and be proactive, recognizing,
6 of course, that sometimes we'll never know if we directly
7 contributed to preventing a casualty or not.

8 But that's not the point. If we can continue to
9 focus on where we can apply our expertise and that of others to
10 improve and continue to improve plant performance and safety
11 performance, I think we will be exercising our responsibilities
12 in an appropriate manner.

13 So for those reasons, I think that this is an
14 excellent program, and I commend the Staff for the efforts to
15 look ahead, and perhaps a look at the overall inspection
16 program might be useful.

17 Are there any other comments from my fellow
18 Commissioners before adjourn.

19 [No response.]

20 CHAIRMAN ZECH: Thank you.

21 Yes?

22 MR. TAYLOR: Mr. Chairman, I'd like to remind you
23 that there are 108 operating plants. Our base program still
24 remains, our basic resident program backed up by Regional
25 specialists, you know, across the country. That remains the

1 backbone of the inspection process.

2 We hear about special inspection teams and so forth
3 that go out in special areas, but the basic oversight of safety
4 remains that very base program. You know, that's 108 plants.

5 CHAIRMAN ZECH: I agree with that, and that's an
6 important point.

7 MR. TAYLOR: No matter how you may multiply or use
8 some of these special inspections, that's the backbone of our
9 oversight of safety.

10 CHAIRMAN ZECH: I agree with that, and I think we can
11 be very proud of the job our resident inspectors do. On the
12 other hand, they are only a few in number, and they can only
13 inspect, you know, a certain small percentage of the plant, and
14 I recognize that the Region and the Headquarters inspections
15 supplement and complement the resident inspectors' job.

16 I agree with you. That's our primary eyes and ears
17 of NRC at the plant itself, and our resident inspector program,
18 in my view, is one of the finest programs we have, and the
19 people out there should certainly be complimented for the
20 commitment they have and the outstanding job they do on a daily
21 basis.

22 On the other hand, I do believe that they need our
23 support and the support of the Regions to supplement and again
24 to complement, because they can only do a certain amount. But
25 for that reason, I think they need this kind of support, too,

1 these kinds of inspection.

2 But you're right. They are the primary means on a
3 day-to-day basis, and I think that's an excellent program. I
4 appreciate, Mr. Taylor, your mentioning it, though.

5 Are there any other comments?

6 [No response.]

7 CHAIRMAN ZECH: If not, thank you very much for an
8 excellent presentation.

9 We stand adjourned.

10 [Whereupon, at 11:30 o'clock, a.m., the Commission
11 meeting was adjourned.]

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CERTIFICATE OF TRANSCRIBER

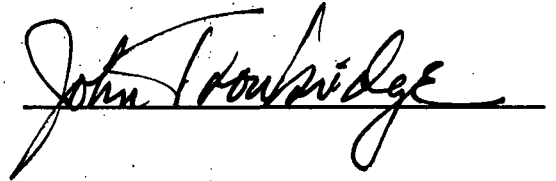
This is to certify that the attached events of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON EFFECTIVENESS OF DIAGNOSTIC EVALUATIONS

PLACE OF MEETING: Washington, D.C.

DATE OF MEETING: WEDNESDAY, NOVEMBER 23, 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 accurate record of the foregoing events.

A handwritten signature in cursive script, reading "John Troubridge", is written over a horizontal line.

Ann Riley & Associates, Ltd.

AEOD PRESENTATION TO THE
COMMISSION ON THE
DIAGNOSTIC EVALUATION PROGRAM

NOVEMBER 23, 1988

PRESENTATION OUTLINE

- * DIAGNOSTIC EVALUATION PROGRAM
- * DIAGNOSTIC EVALUATION PROCESS
- * DIAGNOSTIC EVALUATION RESULTS
- * CONCLUSIONS

DIAGNOSTIC EVALUATION

A BROAD-BASED INDEPENDENT
EVALUATION OF SAFETY PERFORMANCE:

- * TECHNICAL
- * PROGRAMMATIC
- * MANAGEMENT
- * ORGANIZATIONAL

PROGRAM OBJECTIVES

- * IMPROVED UNDERSTANDING OF
LICENSEE SAFETY PERFORMANCE
- * INDEPENDENT ASSESSMENT OF
SELECTED PLANTS
- * EVALUATE PROGRAMS AND PRACTICES
- * DETERMINE ROOT CAUSES

SPECIAL FEATURES OF A DIAGNOSTIC EVALUATION

- * EDO REQUESTS REVIEW
- * EDO APPROVES TEAM AND PLAN
- * SES TEAM MANAGER
- * MEMBERS ARE INDEPENDENT
- * MANAGEMENT CONSULTANTS USED
- * COMPREHENSIVE PERFORMANCE
EVALUATION
- * PLANT AND CORPORATE

(CONTINUED)

- * MANAGEMENT AND ORGANIZATIONAL
CULTURE ASSESSED
- * INTERVIEWS USED EXTENSIVELY
- * ROOT CAUSES EMPHASIZED
- * NRC CONTRIBUTING CAUSES
IDENTIFIED
- * EDO TRANSMITS REPORT
- * EDO ASSIGNS FOLLOWUP ACTIONS

PROGRAM DOCUMENTS DEVELOPED
TO DATE

- * NRC MANUAL CHAPTER 0520, "NRC
DIAGNOSTIC EVALUATION PROGRAM"
- * PROGRAM GUIDELINES
- * SAMPLE EVALUATION PLANS

PLANT SELECTION

- * DISCUSSION AT SENIOR MANAGERS MEETING:
 - * PI, SALP, SIMS, AIT DATA
 - * MANAGERS' PERSPECTIVES
- * SENIOR MANAGERS' RECOMMENDATIONS
- * EDO SELECTS PLANTS

EVALUATION AREAS

- * PLANT OPERATIONS
- * TRAINING AND QUALIFICATION
- * MAINTENANCE
- * SURVEILLANCE AND TESTING
- * ENGINEERING SUPPORT
- * QUALITY PROGRAMS AND SAFETY
REVIEW GROUPS
- * RADIOLOGICAL CONTROLS
- * MANAGEMENT PRACTICES
- * ORGANIZATIONAL CULTURE

TEAM PLANNING AND PREPARATION

- * COLLECT AND REVIEW BACKGROUND INFORMATION
- * REVIEW LICENSEE PERFORMANCE, IMPROVEMENT PROGRAMS AND NRC ACTIONS
- * TAILOR TEAM COMPOSITION TO ASSESSMENT NEEDS
- * CONDUCT TEAM BRIEFINGS
- * SELECT A SYSTEM FOR EVALUATION
- * PREPARE EVALUATION PLANS

ONSITE EVALUATION SEQUENCE

- * OBSERVE AND ASSESS SAFETY PERFORMANCE
- * ASSESS THE QUALITY, IMPLEMENTATION OF PROGRAMS
- * ASSESS MANAGEMENT AND ORGANIZATIONAL EFFECTIVENESS
- * IDENTIFY CAUSES FOR PERFORMANCE PROBLEMS

COMMUNICATION OF RESULTS

- * SENIOR MANAGEMENT BRIEFINGS
- * LICENSEE EXIT MEETING
- * REPORT TRANSMITTED TO LICENSEE
- * ASSIGNMENT OF NRC FOLLOWUP
ACTIONS

COMPLETED DIAGNOSTIC EVALUATIONS

<u>PLANT</u>	<u>UTILITY</u>	<u>REPORT DATE</u>
DRESDEN	CECo	NOV 1987
MCGUIRE	DUKE	MAR 1988
FERMI	DECo	NOV 1988
TURKEY POINT*	FP&L	JUN 1988

*SPECIAL EVALUATION

ROOT CAUSES

- * PLANT NEGLECTED IN FAVOR OF
OTHER PRIORITIES
- * FOSSIL PLANT ATTITUDE
- * LACK OF CLEAR PERFORMANCE GOALS
- * INEFFECTIVE PLANNING FOR
OPERATIONS
- * LACK OF OPERATING EXPERIENCE
- * LACK OF ATTENTION TO HUMAN
RELATIONS MATTERS
- * CORPORATE MICROMANAGEMENT

PERFORMANCE STRENGTHS/IMPROVEMENTS

- * CORPORATE LEADERSHIP, OVERSIGHT
AND INVOLVEMENT
- * INTEGRATED PERFORMANCE PLANS
- * STAFF TECHNICAL CAPABILITIES
- * POSITIVE MANAGEMENT AND STAFF
ATTITUDE TOWARD SAFETY
- * MANAGERIAL AND ORGANIZATIONAL
CHANGES
- * PROGRAMS FOR IMPROVED
ENGINEERING SUPPORT
- * REDUCTION IN CONTAMINATED
AREAS

PERFORMANCE WEAKNESSES

- * STRAINED RESOURCES
- * ORGANIZATIONAL INSTABILITY
- * COMMUNICATIONS PROBLEMS
- * INEFFECTIVE ENGINEERING SUPPORT
- * QA STAFF CAPABILITIES LIMITED
- * UNRELIABLE EQUIPMENT
- * INADEQUATE CHECK VALVE TESTING
- * INADEQUATE MOV MAINTENANCE
- * OPERATOR OVERTIME SAFETY ISSUE
- * IST PROGRAM DEFICIENCIES
- * POOR EQUIPMENT FAILURE ANALYSIS

EDO STAFF ACTIONS

- * GENERIC ACTIONS
 - * APPROVE LICENSEE IST PROGRAMS
 - * EVALUATE INDUSTRY RESPONSES TO CHECK VALVE FAILURES
 - * EVALUATE FAILURES OF AUXILIARY FEEDWATER PUMPS
 - * EVALUATE MOV MAINTENANCE PROGRAMS
- * PLANT-SPECIFIC ACTIONS
 - * HANDLED BY APPROPRIATE OFFICE/REGION

CONCLUSIONS

- * SUCCESS DEPENDS ON INTENSIVE PREPARATION, EXPERIENCED TEAM MEMBERS AND GOOD TEAM COMMUNICATIONS
- * MANAGEMENT AND CULTURE EVALUATIONS ENHANCE ROOT CAUSE ASSESSMENT
- * ROOT CAUSE DETERMINATIONS IMPROVE UNDERSTANDING OF PERFORMANCE PROBLEMS, LIKELIHOOD FOR IMPROVEMENT AND THE NEED FOR ADDITIONAL NRC ACTION

(CONTINUED)

- * PERFORMANCE EVALUATIONS
GENERALLY HAVE CONFIRMED SALP,
PI, AND SENIOR MANAGERS'
PERFORMANCE PICTURE
- * EVALUATIONS HAVE BEEN WELL
RECEIVED BY UTILITIES AND NRC
MANAGEMENT