

# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION

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507th Meeting

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
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ADVISORY COMMITTEE ON REACTOR SAFEGUARDS (ACRS)  
507th MEETING  
+ + + + +  
FRIDAY,  
NOVEMBER 7, 2003  
+ + + + +  
ROCKVILLE, MARYLAND  
+ + + + +

The committee met at the Nuclear  
Regulatory Commission, Two White Flint North,  
Room T2B3, 11545 Rockville Pike, at 8:30 a.m.,  
Mario V. Bonaca, Chairman, presiding.

COMMITTEE MEMBERS PRESENT:

MARIO V. BONACA, Chairman  
GRAHAM B. WALLIS, Vice Chairman  
GEORGE E. APOSTOLAKIS, Member  
F. PETER FORD, Member  
THOMAS S. KRESS, Member  
GRAHAM M. LEITCH, Member  
DANA A. POWERS, Member  
VICTOR H. RANSOM, Member  
STEPHEN L. ROSEN, Member-at-Large

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1 COMMITTEE MEMBERS: (cont'd)

2 WILLIAM J. SHACK, Member

3 JOHN D. SIEBER, Member

4

5 ACRS STAFF PRESENT:

6 JOHN T. LARKINS, Executive Director, ACRS/ACNW

7 SHER BAHADUR, Associate Director, ACRS/ACNW

8 SAM DURAISWAMY, Technical Assistant, ACRS/ACNW,  
9 Designated Federal Official

10 HOWARD J. LARSON, Special Assistant, ACRS/ACNW

11 MEDHAT EL-ZEFTAWY, ACRS Staff

12 ALSO PRESENT:

13 CHARLES ADER, RES

14 GOUTAM BAGCHI, NRR/DE/EMCB

15 ALLAN BARKER, NRR

16 DAN BARSS, NRR/DIPM/RNRP

17 WILLIAM BECKWELL, NRR

18 RUSSELL BELL, NEI

19 LETA BROWN, NRR/DSSA/SPSB

20 BOB CALDWELL, NRR/DIPM/IROB/OES

21 K.M. CAMPE, NRR/DSSA/SPSB

22 MILTON CONCEPCION, NRR/DIPM/IEPB

23 KEVIN COYNE, NRR/DIPM/IEPB

24 LAURA DUDES, DRIP

25 DYLANNE DUVIGNEAUD, NRR/DRIP/RNRP

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1 ALSO PRESENT: (cont'd)  
2 NAN GILLES, DRIP  
3 BRAD HARVEY, NRR/DSSA/SPSB  
4 WES HELD, NRR/DRIP/RNRP  
5 SAMUEL HERNANDEZ, NRR/DIPM/IROB  
6 JOSEPH IBARRA, RES/DSARE  
7 IAN JUNG, NRR  
8 MARCUS KING, Numark Associates  
9 STEVE KLEMENTOWICZ, NRR/DIPM/IEPB  
10 STEVE KOENICK, DRIP  
11 MICHAEL L. KRAIVE, GAO  
12 GEORGE LANIK, RES/DSARE/REAHFB  
13 JAY LEE, NRC  
14 DON MARKSBERRY, RES  
15 SUBINOJ MAZUMDAR, RES  
16 ROBERT E. MOODY, NRR/DIPM/IEPB  
17 CLIFF MUNSON, NRR/DE/EMEB  
18 JESSIE QUICKCOCK, NRR/DIPM/EPHP  
19 TERRY REIS, NRR  
20 SERITA SANDERS, NRR  
21 MICHAEL SCOTT, DRIP  
22 DALE THATCHER, NRR/DIPM/IEPB  
23 JENNY WEIL, McGraw-Hill  
24 BOB WEISMAN, OGC/RP  
25 JERRY WILSON, NRR/DRIP

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

(8:30 a.m.)

CHAIRMAN BONACA: Good morning. The meeting will now come to order. This is the third day of the 507th meeting of the Advisory Committee on Reactor Safeguards.

During today's meeting the committee will consider the following: early site permit review standard; task force report on operating experience; ACRS retreat in 2004, which will be discussed as part of the future ACRS activities report on the planning and procedures subcommittee; reconciliation of ACRS comments and recommendations; proposed ACRS reports.

A portion of this meeting will be closed to discuss the proposed ACRS report on safeguards and security.

This meeting is being conducted in accordance with the provisions of the Federal Advisory Committee Act. Mr. Sam Duraiswamy is the designated federal official for the initial portion of the meeting.

We have received no written comments or requests for time to make oral statements from members of the public regarding today's sessions.

A transcript of portions of the meeting is

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1 being kept, and it is requested that the speakers use  
2 one of the microphones, identify themselves, and speak  
3 with sufficient clarity and volume so that they can be  
4 readily heard.

5 Before we start with the first item on the  
6 agenda, I would like to just go around the table a  
7 moment on the issue of the amount of work that we have  
8 left to do.

9 I have had a number of questions from  
10 members regarding whether or not we meet again  
11 tomorrow. We have three reports left to write. I  
12 believe there is 189, and the one that you prepared,  
13 Jack.

14 MEMBER SIEBER: I'm prepared to do  
15 whatever the committee wants.

16 CHAIRMAN BONACA: Yes. And those are  
17 reasonably -- and then we have the security and  
18 safeguards one. I don't know if you have any view.  
19 It seems to me that we should be able to finish  
20 tonight. I would want those members --

21 MEMBER APOSTOLAKIS: There is a draft  
22 letter.

23 CHAIRMAN BONACA: I'm sorry?

24 MEMBER APOSTOLAKIS: There is a draft  
25 letter.

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1 CHAIRMAN BONACA: Yes. So I would like  
2 members to stay on until 7:00 p.m. tonight, or as long  
3 as we need. And then, if you need to reschedule an  
4 earlier flight tomorrow, I think you --

5 MEMBER FORD: So we are not meeting  
6 tomorrow?

7 CHAIRMAN BONACA: I don't think with what  
8 we have --

9 MEMBER APOSTOLAKIS: But you want us to  
10 sleep in Bethesda tonight?

11 CHAIRMAN BONACA: Well, most of us would  
12 stay overnight anyway.

13 MEMBER ROSEN: You can sleep wherever you  
14 want.

15 (Laughter.)

16 CHAIRMAN BONACA: I'm just doing this for  
17 a couple of members that really have been asking about  
18 that, and I think that we would still have a quorum  
19 tomorrow if we needed to stay longer. But I don't  
20 think so. I don't think we have a need right now.

21 Okay. With that we will start with the  
22 first item on the agenda. That's the early site  
23 permit review standard, and Dr. Kress will introduce  
24 the presenters.

25 MEMBER KRESS: Well, this is our second

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1 briefing on this, and it is another status report on  
2 the review standard that the staff is putting together  
3 on how to review these. And so we're going to hear a  
4 status report on that and on the applications  
5 themselves.

6 I guess to introduce this I'll turn it  
7 over to Ms. Dudes.

8 MS. DUDES: Yes. Thank you. Thank you.  
9 Good morning. I am Laura Dudes. I am the Section  
10 Chief for New Reactors.

11 By way of information, on June 29th, the  
12 Associate Director for Inspection Programs  
13 reorganized, creating a new branch within the Division  
14 of Regulatory Improvement Programs. Jim Lyons is the  
15 Branch Chief of the new Research and Test Reactor  
16 Branch, which includes New Reactors, the section  
17 within NRR, New Reactors, which was formally the New  
18 Reactor Licensing Project Office.

19 Since we last briefed you on early site  
20 permit activities in May 2003, we have received all  
21 three early site permit applications. Exelon and  
22 Dominion submitted their applications on  
23 September 25th, and Entergy submitted their  
24 application on October 21st.

25 The acceptance review for the first two

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1 applications has been completed, and we expect  
2 Entergy's acceptance review to be completed on  
3 October 21st -- or, excuse me, by November 20th.

4 In order to make efficient use of our  
5 experienced environmental review teams, we plan on  
6 staggering our application reviews by two-month  
7 intervals. This morning we are here to provide you a  
8 status of our early site permit activities, including  
9 the review standard.

10 I'd like to introduce to you our project  
11 management team for early site permits. Nanette  
12 Gilles, Project Manager for the Exelon early site  
13 permit; Steve Koenick, Project Manager for the Entergy  
14 early site permit; and Mike Scott, the Project Manager  
15 for the Dominion early site permit and also our lead  
16 PM for the review standard.

17 Mike?

18 MR. SCOTT: Good morning. As Laura  
19 indicated, I'm Mike Scott. I am the lead for the  
20 development of the early site permit review standard.

21 Can everybody hear me okay? Okay. Great.

22 The purpose of this morning's presentation  
23 is to brief the committee, as was indicated by Dr.  
24 Kress, on the status of the ESP review standard. I'd  
25 like to say that we appreciate the letter that the

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1 committee wrote to the Commission after our previous  
2 presentation -- I believe it was in March -- on the  
3 review standard. We are not requesting a letter as a  
4 result of this presentation.

5 We also plan to discuss with you the  
6 public comments on the document and the staff's  
7 responses. Of course, we'll just hit the highlights  
8 on those. We provided to the committee the complete  
9 public responses -- excuse me, public comments and  
10 staff responses to those public comments for your  
11 review.

12 We'll also briefly discuss some of the  
13 generic early site permit issues, and I mention here  
14 in the slide just those that were resolved or  
15 discussed after the March 2003 brief, because the  
16 earlier ones we had previously discussed with you.  
17 And we also plan to discuss the status of the first  
18 three reviews and the first three early site permit  
19 applications.

20 The next slide is just an agenda with the  
21 topics that we plan to discuss.

22 As you may recall, the purpose of RS-002  
23 is primarily to provide guidance to the staff and  
24 information to stakeholders on the review of an early  
25 site permit application. We attempted in the

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1 development of RS-002 to use existing information  
2 already available to the staff; specifically,  
3 NUREG 0800 and NUREG 1555. NUREG 0800, of course, is  
4 the standard review plan, and 1555 is the  
5 environmental standard review plan.

6 The draft RS-002, as you know, was  
7 released for interim use and public comment in  
8 December '02. We came to talk to you early that year,  
9 and, of course, provided you that document for review.  
10 After the time we briefed you, two additional sections  
11 of the review standard were released for public  
12 comment. One was on quality assurance, and the other  
13 was on accident analysis.

14 Those sections used NUREG 0800 as a  
15 starting point, but were extensively revised to  
16 reflect the need for specific guidance for early site  
17 permits.

18 We also considered development of the  
19 section of RS-002 for physical security. However, the  
20 staff elected to issue letter guidance to the three  
21 initial ESP applicants. In the interim, it is  
22 considering the need for guidance to be provided in a  
23 future document such as RS-002 on physical security  
24 measures.

25 As I mentioned, we did receive public

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1 comments. We received actually two sets of comments,  
2 one on the document that we released in December, and  
3 then we had a separate public comment period for the  
4 additional two sections that were released in April.  
5 We received two sets of comments from NEI, one for  
6 each release, and two ESP applicants, which basically  
7 endorsed the NEI comments.

8 We also received comments from the Nuclear  
9 Information and Resource Service on the second set of  
10 chapters, and from, as it says on here, Ms. Sandra  
11 Lindberg, who is a resident of the area around the  
12 Clinton site and represents an organization entitled  
13 "No New Nukes."

14 We responded to those comments by letter.  
15 Their comments are all -- the public comments and  
16 responses are all currently available on the new  
17 reactor licensing website. The staff has  
18 appropriately incorporated the comments into a revised  
19 draft RS-002. And we also incorporated the staff  
20 positions on the early site permit generic issues that  
21 were raised by NEI and which we talked about with you  
22 at the last briefing.

23 MEMBER APOSTOLAKIS: So you will tell us  
24 at some point how you responded to these comments? I  
25 mean, was it anything significant or --

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1 MR. SCOTT: What I planned to do this  
2 morning was to highlight the -- what I would say were  
3 the more significant comments and our responses to  
4 them for --

5 MEMBER APOSTOLAKIS: So you will do that.

6 MR. SCOTT: Yes.

7 MEMBER APOSTOLAKIS: Okay.

8 MR. SCOTT: I didn't plan to talk about  
9 every comment.

10 MEMBER APOSTOLAKIS: No.

11 MR. SCOTT: There were a number of them.

12 The draft RS-002 that we developed that  
13 incorporated all of this information is in management  
14 concurrence. It's actually with OGC currently, and we  
15 are on track to get that to the Commission at their  
16 request.

17 As a result of a staff requirements  
18 memorandum requiring the use of existing or  
19 previously-filed information, the Commission has  
20 requested that the review standard be provided to them  
21 for their review. Our goal for that is by the end of  
22 the year. And then after the Commission's review is  
23 complete, we would issue the document.

24 In the meantime, the staff is using for  
25 the review of the first three early site permit

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1 applications is the draft document that was developed  
2 in December, the additional sections that were  
3 released in April, and the public comment responses  
4 that have been -- although not incorporated into the  
5 text yet, they are in the back of the review standard  
6 as issued to the staff.

7 I'd like to speak briefly about the  
8 generic ESP issues. As I mentioned, we discussed some  
9 of them with you at the previous briefing early this  
10 year. We have met several times with NEI and the  
11 potential applicants to try to facilitate resolution  
12 of these issues.

13 The staff has received a number of letters  
14 from NEI on them and has responded by letter. All of  
15 the letters written by NEI and the staff responses by  
16 letter to NEI are currently available on the new  
17 reactor licensing website. And as well we have, as I  
18 mentioned, incorporated appropriately our positions on  
19 these items in the review standard.

20 No additional ESP-related generic meetings  
21 are planned with NEI. Of course, we now have the  
22 three applications, and so we're focused on specific  
23 interactions with the three applicants.

24 The next few slides discuss some of the  
25 generic issues that we had not previously discussed

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1 with the committee. So I would just like to highlight  
2 a few of those very briefly.

3 There was an issue raised regarding what  
4 the appropriate duration of an ESP should be, how the  
5 applicant should request the duration, and what the  
6 staff would consider in reviewing it. And we came up  
7 with a fairly simple approach here that the applicants  
8 will seek the term that they want up to 20 years, of  
9 course, which is the law. And of course the lead  
10 applicants have all chosen 20 years.

11 The information in the application must  
12 support the term that the applicants are requesting.  
13 And if not, then we will provide them the opportunity  
14 to amend their application to either provide  
15 additional information in support or to request a  
16 different term.

17 MEMBER KRESS: If they don't make it  
18 within the 20 years, what's the process? Do they  
19 reapply for the same site?

20 MR. SCOTT: Do you mean if they choose  
21 during -- if they don't choose during the first 20  
22 years to seek an application, they can request an  
23 extension. There is also a process in the rule by  
24 which if they choose not to utilize the permit at all  
25 that it can -- the site can be remediated. And the

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1 applicant is required to remediate, if they have done  
2 any early -- I'm getting myself mixed up here. That's  
3 post permit.

4 MEMBER KRESS: Yes, okay.

5 MR. SCOTT: They do have the opportunity  
6 to extend the application, to request an extension.

7 MEMBER ROSEN: Is this permit when it's  
8 issued evergreen in the sense that let's say an  
9 applicant requested a permit, got one, and built a  
10 plant, and by year 10 of the time decided to build  
11 another unit. Would he have to reapply?

12 MR. SCOTT: He would have to reapply for  
13 another COL. The application remains -- the ESP that  
14 will have been issued remains valid.

15 MEMBER ROSEN: Okay. That's what I'm  
16 asking. Let's say in year 1, after he gets an ESP, he  
17 could start to build a plant and put it in service,  
18 and then on year 10 he could do it again without a new  
19 ESP, is that right?

20 MR. SCOTT: Assuming that the information  
21 that the applicant has provided in the early site  
22 permit application encompasses the sum total of the  
23 plants he want to put on the site. In other words,  
24 they can provide us information for one or more plants  
25 in the early site permit application.

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1 MEMBER APOSTOLAKIS: But if they do it for  
2 only one, then they would have to do it again if they  
3 wanted to do another --

4 MR. SCOTT: If the information they  
5 provided doesn't support more than one, then they have  
6 to provide additional information, yes.

7 MEMBER LEITCH: Mike, I take it that all  
8 of the applicants have used the -- what's the right  
9 term? The bounding or the envelope --

10 MR. SCOTT: Parameter envelope?

11 MEMBER KRESS: Plant parameter envelope?

12 MEMBER LEITCH: That's it. That's right.

13 MR. SCOTT: Yes, they have.

14 MEMBER LEITCH: They have taken that  
15 approach?

16 MR. SCOTT: That's correct. And I'll talk  
17 a little bit more about that as we go forward.

18 MEMBER LEITCH: Okay. Thanks.

19 MR. SCOTT: There were some comments on  
20 that -- on the review standard.

21 MEMBER LEITCH: Thank you.

22 MEMBER KRESS: But that process seems to  
23 be working okay?

24 MR. SCOTT: Yes. We are, of course,  
25 working in unprecedented territory here, so we're

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1 having some interesting discussions as we get into the  
2 reviews of the applications. And it's too early to  
3 predict how all of those will turn out, but we got --  
4 we were told to expect a plant parameter envelope, and  
5 we got them, and we're working through the reviews.  
6 We're very early in the review process, of course.

7 Another issue that I had previously  
8 touched upon was previously-filed information. The  
9 early site permit applicant may, of course, reference  
10 previously-filed information. They can't do so in a  
11 blanket manner. That is, they need to address some of  
12 the considerations that are shown on the slide.

13 For example, you have a site that, while  
14 very close potentially to an existing reactor, is not  
15 on the exact same place. And soil conditions can  
16 change from part to part of a different -- of a  
17 particular site, so they need to show the  
18 applicability of the information and its use for the  
19 site they actually want to build on.

20 If there is a difference in intended use  
21 of the information from what was originally developed  
22 and how they want to use it now, they need to address  
23 that. And, of course, we have quality assurance  
24 requirements that the information must meet in order  
25 to be used for the early site permit.

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1           The note on the bottom of the slide refers  
2           to the fact that we did get a petition for rulemaking  
3           regarding use of existing information in new reactor  
4           licensing applications, and that petition for  
5           rulemaking was denied. It did not contain the  
6           information such as I have here on the slide.

7           Another issue was effects of new units at  
8           existing sites, which has considerations going both  
9           ways -- the potential effects of the construction  
10          activity associated with a new reactor on an existing  
11          reactor, and the potential effects of the existing  
12          reactor on the new reactor.

13          The licensee, of course, who owns and  
14          operates the existing powerplant retains the  
15          responsibility over the exclusion area, even if the  
16          ESP holder's site lies within it. It might seem that  
17          the ESP applicant and the licensee are the same  
18          entity. However, it turns out that frequently they  
19          are not.

20          All three of the applicants that we have  
21          received applications from are related entities to the  
22          existing licensees, but not the same entity.

23          The ESP holder and licensee should have  
24          appropriate managerial and administrative interfaces,  
25          of course. Staff is considering a condition on ESPs

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1 to require the ESP holder to notify the licensee that  
2 they are undertaking limited site work, which is  
3 authorized under certain conditions by 10 CFR Part --

4 MEMBER ROSEN: Could you characterize the  
5 kind of things that are included in limited site work?

6 MR. SCOTT: It's like going out and doing  
7 grading work, non-safety construction, administrative  
8 buildings, that sort of thing.

9 MEMBER ROSEN: Could you build a turbine  
10 building?

11 MR. SCOTT: I'm not sure, but -- Jerry,  
12 can you help me with that one?

13 MR. WILSON: This is Jerry Wilson, New  
14 Reactor Section. What we're talking about is  
15 specifically LWA-1 activities that are in  
16 10 CFR 50.10(e)(1), and that is things, as Mr. Scott  
17 said, creating an excavation and clearing.

18 If you get into physical structures, that  
19 would come under what we call LWA-2, and that's not  
20 authorized in accordance with an early site permit.

21 MEMBER ROSEN: Could you build a  
22 meteorological tower? Could you take borings?

23 MR. WILSON: Yes, of course. And in fact  
24 that's done as part of the data acquisition process in  
25 preparing an application for an early site permit.

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1 And so that is not controlled by the permit, but in  
2 fact is an allowed activity.

3 MEMBER ROSEN: How about limited  
4 trenching?

5 MR. WILSON: Yes. You would have to do  
6 that, too, for any investigation you would do for  
7 onsite faulting and other geologic information.

8 MEMBER ROSEN: Sub-soil characterization  
9 of the --

10 MR. WILSON: Certainly.

11 MR. SCOTT: And the ESP applicant must  
12 address the impacts of the existing reactor on the  
13 proposed site, as I mentioned.

14 I would now like to talk about public  
15 comments on RS-002. The NEI comments, as I mentioned,  
16 were endorsed by the two ESP applicants. That's the  
17 comments that were provided on the version of the  
18 document that was released in December '02. Some of  
19 the focus of the significant safety site comments were  
20 to clarify what is needed at the early site permit  
21 stage versus what is needed at the COL stage.

22 We started out with a document, NUREG  
23 0800, that was intended to capture all of the site and  
24 the design issues. And so, of course, there was  
25 cross-reference back and forth between the site-

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1 related sections to the design-related sections.

2 Well, in the early site permit space we  
3 don't have any design-related sections to cross-  
4 reference to, and that's what the objective is -- not  
5 to review the adequacy of the design. When we went  
6 through the development of the early site permit  
7 review standard in December of last year, we attempted  
8 to eliminate unnecessary information requests related  
9 to the design, and in some cases we fell short. And  
10 some references escaped our attention, and the  
11 commenters brought those to our attention and we've  
12 gone back and taken care of that.

13 It's not always clear-cut as to where you  
14 draw the line between what's needed at early site  
15 permit versus what's needed at COL, and that's how we  
16 got into the discussion of the plant parameter  
17 envelope and its use in early site permits.

18 The next bullet refers to that. When we  
19 developed the December draft, the staff was still  
20 having ongoing discussions with NEI and the applicants  
21 regarding how the PPE concept would be used. So we  
22 pretty much put a placeholder in the review standard  
23 and said that the staff will develop appropriate  
24 guidance.

25 The language that existed in the review

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1 standard at the time paralleled the rule -- Part 52.17  
2 -- which said that the type and number of reactors  
3 should be provided. And we changed, in response to  
4 the comments on the plant parameter envelope, to allow  
5 for the fact that in lieu of that information -- the  
6 type of reactor and the number of reactors -- the  
7 design surrogate information could be provided by a  
8 plant parameter envelope.

9 MEMBER KRESS: Now, as I recall, one of  
10 the sticking points of that was whether or not there  
11 was a need for a source term specification.

12 MR. SCOTT: There was. There is a  
13 separate comment on that. NEI had commented that they  
14 believe that the focus of the, if you will, end result  
15 of the evaluations for the ESP, the measure of the  
16 site's effectiveness, would be the chi over Q, the  
17 dispersion.

18 The staff took a look at that. However,  
19 the rules we believe are clear. 10 CFR 52.17(a)(1)  
20 calls for an evaluation of the site against the dose  
21 consequence evaluation factors in 10 CFR 50.34(a)(1).  
22 We sent a letter to NEI and to the applicants that  
23 stated that staff position. We acknowledged that a  
24 PPE could be used to provide the source term.

25 We further acknowledged that the

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1 information that we had originally put in the draft  
2 review standard regarding the appearance of  
3 radionuclides in containment was really not necessary,  
4 if the ESP states what we're looking for is the  
5 release of radionuclides to the environment.

6 So then we would consider the source term,  
7 which might be a PPE, and then the source term, once  
8 the radionuclides are released, is a function of the  
9 site characteristics that ends in being a dose number  
10 which is part of -- which is then compared with the  
11 dose and response evaluation factors.

12 MEMBER KRESS: Now, if the PPE is  
13 structured such that peaks limiting design features  
14 from various candidate types of reactors that might be  
15 put on the site -- and also specifies chi over Q,  
16 would that not be sufficient to say it automatically  
17 meets the dose characteristics if the chi over Q  
18 values and the bounding design description values were  
19 for already-certified plants, or already-existing  
20 licensed plants?

21 MR. SCOTT: In effect, the three  
22 applicants have done that. They've used the ABWR and  
23 the AP1000 and done more or less what I said, which is  
24 similar to what you said. They actually ran through  
25 and came up with a number and compared it with 50.34.

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1 That's not far different I think from what you just  
2 said.

3 MEMBER ROSEN: How do you handle the fact  
4 that, you know, the building effects, the building  
5 wake effects and those kind of things sometimes factor  
6 into these calculations, when you don't know what the  
7 building is going to look like exactly or where  
8 they're exactly going to be?

9 MR. SCOTT: I believe -- and I'll ask Jay  
10 Lee to correct me if I state this wrong, but they are  
11 conservatively assuming a ground-level release and  
12 neglecting building effects, building wake effects.

13 MR. LEE: Yes, that's correct.

14 MR. SCOTT: That was Jay Lee of our SPSB  
15 group.

16 MEMBER KRESS: Was that conservative?

17 MR. LEE: Yes.

18 MEMBER KRESS: In other words, building  
19 wake effects improve the dispersion?

20 MR. SCOTT: It retarded from getting  
21 offsite.

22 MEMBER KRESS: You're worried about  
23 control room habitability issues?

24 MR. SCOTT: We do not revert -- we do not  
25 address control room habitability of --

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1 MEMBER KRESS: That's at the COL stage.

2 MEMBER ROSEN: No, I'm not worried about  
3 control room. In this line of questioning I'm really  
4 trying to think about if you just use chi over Q  
5 information, wind rose information, and topographical  
6 information, would that be sufficient? Because you  
7 don't know where the plant is actually going to be  
8 exactly, and you don't know what the configuration of  
9 the building is going to be relative to the wind  
10 roses.

11 So, you know, you can -- I'm just  
12 wondering -- worrying that we might get into a  
13 situation where you don't estimate it conservatively.  
14 When the applicant finally comes in and places the  
15 buildings, it isn't -- what you did earlier wasn't  
16 conservative.

17 MR. SCOTT: The applicant is burdened with  
18 -- in using a PPE with being conservative. Now, if  
19 they come in at the combined license stage, and they  
20 have a configuration that would result in a higher  
21 dose rate than was calculated at the ESP, then the  
22 issue would be subject to being reopened.

23 So they are both burdened, and they really  
24 need for the sake of the usefulness of the ESP to be  
25 conservative at the ESP stage.

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1 MR. WILSON: Mike, this is Jerry Wilson.  
2 I want to add also that the applicant does have to  
3 specify the exact location on the site where they  
4 intend to build the plant, and the review is done on  
5 that location. The permit doesn't authorize any  
6 location on the site, but just the specific location  
7 that's defended in the application.

8 MR. SCOTT: They just made a footprint is  
9 what they do, an ESP footprint.

10 MEMBER ROSEN: So if the applicant moves  
11 it 10 feet from that, he has to justify or --

12 MR. SCOTT: That's correct.

13 MEMBER ROSEN: I mean, that could easily  
14 happen when you do all of the subsurface  
15 investigations and find out that it would be better if  
16 it was, you know, just a little bit this way instead  
17 of that way and --

18 MR. SCOTT: That's true. I would say that  
19 at least based on the application that I'm the PM for  
20 they have a fairly large footprint. There's a fair  
21 amount of --

22 MEMBER ROSEN: Flexibility in that.

23 MR. SCOTT: -- room in that. Yes.

24 Okay. As I mentioned, the other  
25 significant items that I won't go over in detail

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1 unless the committee would like to hear them is the  
2 generic issues. All of the ones that were -- that  
3 have been addressed, which is some population of the  
4 ones that were considered, are appropriately  
5 incorporated in RS-002.

6 The next slide -- staff will -- as I  
7 mentioned, the staff will address the PPE concept in  
8 RS-002 using language similar to what you see in this  
9 slide -- a nuclear powerplant of specified type or as  
10 defined by a PPE. We put specific guidance for use of  
11 PPE in there. Staff will, of course, clarify in  
12 RS-002 what information is needed at COL.

13 An ongoing issue of concern has been the  
14 applicability of Appendix B to early site permits.  
15 You may recall we discussed this with you in March.  
16 The staff believes that quality assurance measures  
17 equivalent in substance to those in Appendix B are a  
18 necessary starting point for the staff's review.

19 We are not requiring the applicants to  
20 provide us a QA program plan with their application,  
21 but the staff is asking or will ask the applicants to  
22 provide descriptions of the measures they are using  
23 such that the staff can have confidence in the  
24 reliability and integrity of the data that supports  
25 the application.

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1           We believe that is required, even though  
2           10 CFR Part 52 does not explicitly address quality  
3           assurance.    The finality provisions of 10 CFR 52  
4           require the staff to have confidence in the data when  
5           we make the decisions that we make at the ESP stage,  
6           because absent certain very limited circumstances we  
7           are not allowed to revisit those at the COL stage.

8           MEMBER ROSEN:   I don't know why you are  
9           being so delicate about it.   I mean, after all, the  
10          plants are going to have to be designed, built, and  
11          constructed in accordance with Appendix B.   The  
12          question is:  when does that start?  It seems to me  
13          you don't need to be so delicate.  You can just say it  
14          starts now when you come in and ask for an ESP.

15          MR. SCOTT:   Effectively, it does, but  
16          we're dealing with a regulatory framework which is not  
17          quite as straightforward as that that's applicable to  
18          Part --

19          MEMBER ROSEN:  But what you do will define  
20          the -- will become precedent.

21          MR. SCOTT:   Yes.

22          MEMBER ROSEN:  So, you know, it seems to  
23          me that you build a trap for the licensee --

24          MR. SCOTT:   Well, we don't --

25          MEMBER ROSEN:  -- in some respects.  If

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1 they don't -- if you don't say up front, "This whole  
2 thing is going to be designed, built, and constructed  
3 in accordance -- and operated in accordance with  
4 Appendix B," so there's no period of time after you  
5 decide to make the filing, or maybe even before the  
6 filing, when you're not covered by Appendix B, because  
7 then you have to make a transition out of whatever it  
8 was your quality assurance program was -- equivalent  
9 in substance or something like that -- to full  
10 Appendix B. And it seems to me that's more  
11 complicated than just saying right up front, "Bite the  
12 bullet."

13 MR. SCOTT: And the staff would prefer  
14 that we were able to do that, but the legal framework  
15 does not give us that option. However, if you look at  
16 what we have put in the review standard for guidance  
17 on quality assurance for early site permit  
18 applications, it is information of the same type  
19 framework as Appendix B.

20 All we're saying is we're going to use  
21 Appendix B to review the applicant's quality assurance  
22 measures.

23 MEMBER ROSEN: Well, I don't want to beat  
24 it to death, but have you talked to OGC about whether  
25 the law -- the framework is --

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1 MR. SCOTT: Extensively.

2 MEMBER ROSEN: Okay.

3 (Laughter.)

4 Well, I'm not a lawyer, so I don't know,  
5 but --

6 MR. WILSON: Once again, this is Jerry  
7 Wilson. I just want to point out that in our  
8 preapplication review meetings with the applicants we  
9 did state in effect what you said is that we made it  
10 clear that it was our expectation that their data  
11 acquisition, data analysis, and reports justifying  
12 those site characteristics that affect safety-related  
13 structures should be done in accordance with a program  
14 that's equivalent to Appendix B. So they were on  
15 notice early on in that regard.

16 MR. SCOTT: Other items? There was a  
17 comment regarding the maximum design basis tornado  
18 wind speed. There has been correspondence back and  
19 forth about 10 years ago regarding what the  
20 appropriate assumption of tornado wind speed would be  
21 for design certifications. And through a SECY the  
22 staff accepted 300 miles per hour as a number to be  
23 used as a nominal site parameter, if you will, for  
24 design certification.

25 The comment had been made that we should,

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1 therefore, accept 300 miles an hour as a site  
2 characteristic for all sites. The staff does not  
3 believe that's technically supportable. If you look  
4 at the data that's available, there are several  
5 regions of the country where 300 miles per hour would  
6 be a non-conservative tornado wind speed.

7 What we have told the applicants is that  
8 there is a reg. guide that's out there that provides  
9 a number for different regions of the United States.  
10 They can use that or they can use any number they care  
11 to, as long as they can justify it on a site-specific  
12 basis.

13 MEMBER KRESS: Does that mean they can use  
14 less than 300 for some sites that --

15 MR. SCOTT: If you can justify it, yes.  
16 You may use the site parameter -- or site  
17 characteristic, I'm sorry -- if you can justify it  
18 based on site-specific data.

19 Another issue is that the staff will  
20 clarify that the applicants may choose to address more  
21 issues at the early site permit stage than is  
22 contemplated at RS-002. When we developed RS-002, we  
23 deliberately deleted information that we did not  
24 believe was germane to an early site permit, and that  
25 we did not believe would be provided by applicants.

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1           However, we recognize -- and the  
2 commenters highlighted for us -- the circumstances  
3 under which an applicant will come in. They may come  
4 in with more design information rather than a PPE.  
5 They may ask for resolution of more issues than the  
6 staff had intended or expected to be resolved at the  
7 ESP stage. So the comment was: adjust the review  
8 standard to allow for that, and we're doing that.

9           CHAIRMAN BONACA: Yes. Regarding the  
10 maximum design basis tornado, you said that under  
11 certain conditions, if an applicant can justify a  
12 lower maximum design basis tornado, they can do that.

13           MR. SCOTT: Right.

14           CHAIRMAN BONACA: What criteria do you use  
15 for acceptance of a lower number? I mean, you still  
16 would want to have a margin, right? Some margin over  
17 an experienced maximum tornado wind speed for the  
18 area.

19           MR. SCOTT: That's correct.

20           CHAIRMAN BONACA: Do you have a criterion  
21 for that?

22           MR. SCOTT: The staff has reg. guides  
23 applicable to this subject, yes.

24           CHAIRMAN BONACA: So there is guidance  
25 there --

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1 MR. SCOTT: There is guidance, yes.

2 CHAIRMAN BONACA: -- for a licensee to  
3 know what kind of margin he is committed to.

4 MR. SCOTT: I believe that is covered in  
5 those reg. guides, yes.

6 CHAIRMAN BONACA: All right.

7 MEMBER LEITCH: A question about the  
8 review standard. The applications you've received  
9 thus far have all been for an additional unit or units  
10 on an existing site. Is the review standard broad  
11 enough to deal with a new site?

12 MR. SCOTT: Yes. The review standard is  
13 intended to provide guidance for a greenfield as well  
14 as an existing site, yes.

15 MEMBER LEITCH: Now, are there any open  
16 construction permits at the moment? It seemed to me  
17 there may be at least one.

18 MR. SCOTT: There are, that I can think  
19 of, a couple. I believe Bellafonte still has a CP,  
20 but those are plants that are -- some of them at least  
21 are well advanced in construction. Quite frankly, we  
22 haven't heard interest from other parties other than  
23 the three we have here directly.

24 MEMBER LEITCH: I seem to recall that  
25 perhaps Watts Bar has a unit that's very nearly

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1 complete, that --

2 MR. SCOTT: They do. I don't know whether  
3 they have a CP for it or not.

4 Mr. Wilson, do you know?

5 MR. WILSON: Jerry Wilson. I don't  
6 recall. You're talking about Watts Bar 2, and that  
7 hasn't been completed.

8 MR. SCOTT: No, they don't have a CP.

9 MEMBER LEITCH: So if the construction  
10 permit has expired, and they would want to complete  
11 the unit, it would go through this process, too? Is  
12 that --

13 MR. SCOTT: Complete a unit that's been  
14 constructed that -- this far under Part 50, I -- that  
15 sounds pretty unwieldy.

16 MR. WILSON: Mike, this is Jerry Wilson  
17 again. No, you wouldn't use this process. Remember,  
18 this process is for banking a site for future use, and  
19 so let's take the particular example you're talking  
20 about, specifically Watts Bar 2, and let's assume for  
21 the moment that DBA wanted to complete that unit.  
22 They would come in under Part 50 and seek an operating  
23 license.

24 First of all, they'd have to reestablish  
25 their construction permit. I mean, assume Dr. Kress

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1 is correct and they don't have one. They'd have to  
2 reapply for their construction permit and follow  
3 through on that process.

4 MEMBER LEITCH: Okay. So this process  
5 would not be --

6 MR. WILSON: Yes. There wouldn't be any  
7 benefit in going through this process.

8 MEMBER LEITCH: No. Okay. Thank you.

9 MEMBER KRESS: Let me ask you a strange  
10 question. Other than environmental considerations  
11 like overheating the water sink, heat sink, or things  
12 like that, is there some consideration in the  
13 regulations somewhere that will limit the number of  
14 plants that can be put on a site?

15 MR. SCOTT: There is no specific --

16 MEMBER KRESS: Other than the  
17 environmental rules. I know there are some of those  
18 that could stop it, but --

19 MR. SCOTT: There are parameters that  
20 could result from a large number of reactors for --  
21 you referred to one. For example, let's say that you  
22 had a reactor or are contemplating putting a reactor  
23 on a lake that has a certain heat sink capability, and  
24 the more reactors the more you stress the heat sink.  
25 But there's nothing that says you can only --

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1                   MEMBER KRESS:     But there's no risk  
2                   criteria that will limit the number of plants on a  
3                   site.

4                   MR. SCOTT:    Only indirectly, because you  
5                   have to -- however many you plan to put on the site,  
6                   you have to demonstrate that you comply with the  
7                   regulations for offsite dose.

8                   MEMBER KRESS:   Yes.  But that doesn't add  
9                   up the doses from the various plants.

10                  MR. SCOTT:     Right.     There is no  
11                  specific --

12                  MEMBER KRESS:   There's no risk.  For  
13                  example, if you exceeded the LRF acceptance criteria,  
14                  there's no way -- there's no real regulation that  
15                  says, no, you can't build any more plants on this  
16                  site.

17                  MR. WILSON:   Dr. Kress is familiar with  
18                  the work Tom King has been doing, and we've had  
19                  internal discussions about this issue at -- you know,  
20                  there is no specific set number at the moment.  But at  
21                  some point if you envisioned a site with a lot of  
22                  plants -- I think the NRC asked a question about a  
23                  tradeoff between individual risk caused by an  
24                  accumulation of plants versus societal risk and  
25                  whether we have gotten to a point where there's too

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1 much risk there, it's an interesting --

2 MEMBER KRESS: I have no doubt that it  
3 asked that question, but there's no real way to --

4 MR. WILSON: And I think we'd ask the ACRS  
5 that question is what we'd do.

6 MEMBER ROSEN: And we'd ask Tom Kress.

7 MEMBER KRESS: And I'd tell them.

8 MR. SCOTT: Another item that we have  
9 received a comment on is the review standard carried  
10 over from NUREG 0800, discussion of the operating  
11 basis earthquake.

12 Now, as it turned out we carried over  
13 discussion from the 1981 version of NUREG 0800, and  
14 there was a newer version that had actually eliminated  
15 that discussion. And it's not a necessary topic for  
16 early site permit, so we responded that we would  
17 delete reference to OBE from the -- our review  
18 standard.

19 Of course, once the safe shutdown  
20 earthquake is calculated, then the rules have means  
21 for calculating the OBE. But it's not a necessary ESP  
22 subject.

23 We talked about this next one -- the full  
24 review of the radiological consequences -- so I won't  
25 plan to go over that again.

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1 I've talked so far about the comments we  
2 received from the industry, from NEI and the  
3 applicants. The next slide discusses the comments  
4 that we received from the Nuclear Information Resource  
5 Service and Sandra Lindberg. These comments, as you  
6 know from your review, generally focused on a wide  
7 variety of issues, most of which by regulation are  
8 outside the scope of early site permit.

9 And so we struggle to respond positively  
10 to the comments, but recognize that really there was  
11 no change that was needed or even appropriate for the  
12 review standard. And this slide carries some examples  
13 of some of the issues that were addressed. There was  
14 concern about terrorism as an initiator for design  
15 basis accidents. Of course, this is a much larger  
16 issue that's been under discussion outside the ESP  
17 framework.

18 Spent fuel pool and dry cask storage  
19 safety -- specifically the discussions that have been  
20 going on regarding catastrophic spent fuel pool  
21 accident -- which, of course, is outside the scope of  
22 an early site permit, spent fuel disposal.

23 Yucca Mountain is specifically in the  
24 regulations stated to be a subject that has been  
25 resolved by the Commission pending continuing

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1 monitoring, so it need not be addressed in individual  
2 applications. And there were concerns about  
3 containment design, and, of course, design is not a  
4 subject for early site permits, so that didn't apply  
5 as well.

6 Both commenters expressed concern with the  
7 PPE concept. The commenters seemed to see the use of  
8 the PPE concept as a risk to public health and safety.  
9 The staff pointed out in its comment responses that  
10 the applicant who chooses to use a PPE accepts the  
11 fact that the COL applicant, in referencing such an  
12 ESP, will need to demonstrate that the parameters of  
13 the actual plant design fall within the PPE. If they  
14 can't do that, then the issues become available for  
15 reconsider -- yes, available for reconsideration at  
16 the COL stage.

17 So, therefore, the staff does not see the  
18 applicant's use of a PPE as a risk to public health  
19 and safety at the ESP stage.

20 MEMBER ROSEN: So, in that sense, when the  
21 applicant proposes a given PPE, the staff may think  
22 that, well, it really ought to be broader than that.  
23 I'm just taking hypothetical parameter X, that the  
24 applicant proposes that it should be between two and  
25 five. And the staff thinks it really ought to be

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1 between one and six for reason -- whatever reasons.

2 But the staff really has no basis to say  
3 it ought to be between one and six. If the applicant  
4 says between -- he's going to design between two and  
5 five, so be it. Isn't that the way you would take it?

6 MR. SCOTT: That's correct. We have  
7 stated in our letter to NEI and the applicants on that  
8 subject that the criterion is that it's not  
9 unreasonable. We are not going to examine the PPE in  
10 detail for the sort of considerations you're talking  
11 about. It is the applicant's burden to provide a PPE  
12 that they can live with at the COL stage.

13 MEMBER ROSEN: Okay. That's the hard-and-  
14 fast nut of this. And then, if the applicant later  
15 comes back and says, "You know when you guys were  
16 talking about one and six? Well, six is really too  
17 much, but we probably need one." That's a big  
18 problem, isn't it?

19 MR. SCOTT: It means that --

20 MEMBER ROSEN: At that point?

21 MR. SCOTT: It means that -- you're  
22 talking post ESP there.

23 MEMBER ROSEN: Yes, right.

24 MR. SCOTT: Then, that's an issue that's  
25 subject to evaluation at the COL stage.

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1                   MEMBER ROSEN:    Okay.    So then it just  
2                   flips into the COL stage.

3                   MR. SCOTT:    Right.    But what the practical  
4                   effect is is that, if you will, it reopens it.

5                   MEMBER ROSEN:    Right.    It reopens that  
6                   issue for the COL.

7                   MR. SCOTT:    Right.    So it's certainly not  
8                   to the applicant's advantage, therefore.    It's  
9                   important to them that they have a PPE they can live  
10                  with at the ESP stage.    And they're looking into the  
11                  future in a sense, and the reason why they have the  
12                  PPE is because they want to keep their options open  
13                  for a future design as yet perhaps not visible to  
14                  them.    But they want to set their PPE broad enough to  
15                  envelope that reactor design as well.

16                  Just    for    your    information,    the  
17                  applications that we've gotten have -- at least two of  
18                  them have said, "We looked at the following reactors  
19                  when we made our PPE."    But the PPE doesn't say this  
20                  number is for one reactor or another.

21                  MEMBER LEITCH:    This may sound like a  
22                  facetious question, but could it -- it almost sounds  
23                  like an applicant could say, "I'd like to build a  
24                  plant here, and I'm going to comply with all of the  
25                  regulations.    My bounding numbers -- the one and the

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1 six or whatever," to use Steve's example, "are going  
2 to be just within the regulatory bounds. And I'm  
3 going to build a certified design." Okay?

4 MR. SCOTT: Right. I'm not sure what your  
5 question is.

6 MEMBER LEITCH: I mean, could the  
7 application be that broad? I'm basically going to  
8 comply with all of the regulations, and I'm going to  
9 build a certified design. Can I have your permission  
10 to --

11 MR. SCOTT: So you're talking about  
12 somebody submitting a certified design with their ESP.

13 MEMBER LEITCH: No, a pre-certified  
14 design.

15 MR. SCOTT: They could use that as a PPE,  
16 if you will. I mean, they could -- we have -- the  
17 guidance allows for different possibilities for the  
18 applicant coming in with a PPE, for the applicant  
19 coming in with a non-certified design, or with a  
20 certified design. And there are different forks in  
21 the road as far as how we handle it.

22 CHAIRMAN BONACA: But you have two  
23 specified parameters.

24 MR. SCOTT: Right. What they have to do  
25 is provide enough information for us to verify that

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1 they've met the regulation. Specifically, the one  
2 that's the sticking point is 52.17(a)(1), dose  
3 consequence evaluation, referring to 50.34. They have  
4 to provide enough information to support that, and  
5 there are -- as you know, there are various options  
6 for doing that.

7 MEMBER KRESS: What the plant parameter  
8 envelope does for the applicant is given the -- if  
9 they're broad enough and conservatively enough that  
10 they can choose from any number of types of reactor  
11 designs, and those will fit into this plant parameter  
12 envelope. So it gives them the flexibility of not  
13 being tied into just one reactor or design at the time  
14 of their inception.

15 MR. SCOTT: Right. Yes. And that is, in  
16 fact, what all three have chosen to do. And we assume  
17 in the future that's what they're going to do as well.

18 Laura talked briefly about the status of  
19 the three ESP applications, and I won't dwell on that.  
20 We did, as she mentioned, need to stagger the reviews  
21 of the three applications, because of resource issues  
22 and the fact that two of the three applications came  
23 in late.

24 MEMBER KRESS: What does the middle bullet  
25 mean there?

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1 MR. SCOTT: Acceptance review is complete?

2 MEMBER KRESS: Yes.

3 MR. SCOTT: Well, we are required when the  
4 applications are submitted to determine whether they  
5 are sufficiently complete to support a staff review.

6 MEMBER KRESS: Oh, I see. I see.  
7 That's --

8 MR. SCOTT: That's the --

9 MEMBER KRESS: You haven't fully -- you  
10 haven't reviewed them. You've just said, "We're going  
11 to review it, and this is enough information."

12 MR. SCOTT: Right. That's in 10 CFR  
13 Part 2. Basically, it's just, is there enough  
14 information there to start the staff's review? It  
15 makes no decision as to -- or inference as to whether  
16 we find it satisfactory or not. It just says we've  
17 got enough to get started.

18 And two of the three -- the ones that came  
19 in on September 25th have gone through that process,  
20 and the third one is going through that process now.

21 MEMBER KRESS: I presume these applicants  
22 have no problems with these timeframes. They look  
23 like they're pretty expeditious to me.

24 MR. SCOTT: Well, I guess the short answer  
25 to your question is nobody has a concern with the time

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1 that's been allotted here. There is 21 months --  
2 don't misunderstand this. The staff's review will  
3 take 21 months. This is a -- the two and four months  
4 is a delta.

5 MEMBER KRESS: A starting point.

6 MR. SCOTT: Yes. I'd really like to be  
7 able to turn them out in two months, but I don't think  
8 we could -- can we do that? No.

9 MEMBER KRESS: No.

10 MR. SCOTT: The staff's review is 21  
11 months, and then we assume 12 months for the hearing  
12 and Commission's decision process. So the total is 33  
13 months.

14 What the delta means here is 21 months for  
15 North Anna, 23 for Exelon, and 25 for Clinton.

16 MEMBER KRESS: Okay.

17 MR. SCOTT: I'm sorry. Grand Gulf.

18 VICE CHAIRMAN WALLIS: So it takes three  
19 years to make a decision?

20 MR. SCOTT: It will not take the staff  
21 three years to make a decision. It'll take the staff  
22 21 months to make a decision and make a  
23 recommendation.

24 VICE CHAIRMAN WALLIS: So it will be three  
25 years before a decision is made that --

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1 MR. SCOTT: Close to it. If the  
2 assumptions about the hearing are correct. That is a  
3 process that's outside our control. As you know, this  
4 is a mandatory hearing.

5 MEMBER KRESS: But when you complete the  
6 hearing and have decided to grant this early site  
7 permit, what is the mechanism then? Is that a law?  
8 Does it become a rule, or is it just a letter from the  
9 Commission to the applicant?

10 MR. SCOTT: It will be a permit that will  
11 be submitted.

12 MEMBER KRESS: It'll be a permit.

13 MR. SCOTT: Yes, it is a permit. And we  
14 are still working on what the wording of that would  
15 be, and some of the issues that we've talked about  
16 today will be tied up in what that wording will be.

17 MEMBER ROSEN: You said something I didn't  
18 know, and I -- you said there's a mandatory hearing --

19 MR. SCOTT: That's correct.

20 MEMBER ROSEN: -- before the ESP can be  
21 heard. And even if there's no intervention, and there  
22 is no -- no intervenors are granted status to  
23 participate, there still is a hearing?

24 MR. SCOTT: That's correct.

25 MEMBER ROSEN: What would be heard? I

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1 mean --

2 MR. SCOTT: There are requirements for  
3 what happens in an uncontested hearing. I'm not  
4 prepared to address them in detail, but we -- Nan, do  
5 you want to say something?

6 MS. GILLES: I was just going to say that  
7 in that case it would just be the staff answering  
8 questions from the licensing board. Is that correct,  
9 Bob? Yes.

10 MEMBER ROSEN: That would be ASLB?

11 MS. GILLES: Yes.

12 MR. SCOTT: Yes, that's correct. Bob, did  
13 you want to add something?

14 MR. WEISMAN: I'm Bob Weisman from OGC.  
15 The regulations in 2.104 and 52.21 spell out what has  
16 to be heard in the -- in an uncontested proceeding.  
17 So it's -- pretty simply, it's the ultimate safety  
18 conclusion -- no undue risk, the ultimate conclusion  
19 on the environmental side, plus a finding with respect  
20 to Part 100. So those are the three issues the ASLB  
21 would be considering in an uncontested proceeding.

22 MEMBER ROSEN: Okay. Thank you.

23 MR. SCOTT: I'd like to address a little  
24 bit the ESP application submittal delays, which we've  
25 talked about. We expected originally to receive two

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1 applications in June and one in September. The two in  
2 June were from Exelon and Entergy, and then Dominion  
3 was going to come in in September.

4 The way it developed was Dominion came in  
5 as -- basically, as planned, a day ahead of their  
6 projected date. The other two -- one came in in  
7 September, as we mentioned, and the other one in  
8 October. The reason for the delays relate to the  
9 issues that are discussed on this slide.

10 All three applicants were using a  
11 probabilistic approach, of course, in accordance with  
12 Part 100 to characterize the seismic hazard. They  
13 were all dependent upon completion of an EPRI report,  
14 a ground motion attenuation study, that they had  
15 expected to receive at the beginning of this calendar  
16 year and did not, in fact, become available to them  
17 until substantially later in the year. So they were  
18 all put behind schedule as a result of that.

19 Furthermore, the ground motion  
20 uncertainties were higher than previously recommended  
21 by EPRI, and this caused them to have some  
22 difficulties with the results they got using the Reg.  
23 Guide 1.165 endorsed methodology. And so two of the  
24 three applicants have come in with a methodology for  
25 calculating the seismic hazard. That differs somewhat

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1 from that in Reg. Guide 1.165.

2 The staff is currently considering how to  
3 accept, whether to accept that different methodology.  
4 So the delays were all related to the seismic issues.

5 The next slide just shows a timeline.  
6 This is similar to what we showed you at the March  
7 update. I just changed the nominal timeline numbers  
8 to show actual dates based on the receipt of the  
9 Dominion application, which was the first one that  
10 came in. Actually, it was the second one by 15  
11 minutes to come in, but it's the first one to be  
12 reviewed, because the staff had already allotted  
13 resources to support the review of that application.

14 And so they are -- the schedule you see on  
15 this slide is for Dominion. The other two are  
16 approximately two months later as far as the  
17 completion of the milestones.

18 MEMBER KRESS: So we have a commitment in  
19 December of next year.

20 MR. SCOTT: We've pencilled in the full  
21 committee and subcommittee reviews. For Dominion it  
22 would be in December, and then two months later, of  
23 course, and four months later for the other two, yes.

24 VICE CHAIRMAN WALLIS: So is the -- what  
25 is it, one FTE working full time on this thing for a

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1 year, let's say, or over a year?

2 MR. SCOTT: You're speaking of staff  
3 resources?

4 VICE CHAIRMAN WALLIS: Yes. I'm trying to  
5 figure out what's going on during all this time.

6 MR. SCOTT: Well, the issue is that the  
7 technical resources that reviewed these applications  
8 are not hours for full time. As a matter of fact, the  
9 same staff resources that are reviewing the ESPs are  
10 supporting license renewals --

11 MEMBER SIEBER: Right.

12 MR. SCOTT: -- which have a high priority,  
13 of course, for the Commission. So we're sharing time.

14 VICE CHAIRMAN WALLIS: So the time is  
15 probably exchanging letters and questions, and --

16 MEMBER SIEBER: Hearings.

17 VICE CHAIRMAN WALLIS: -- all that sort of  
18 stuff, rather than someone just working through this?

19 MR. SCOTT: Well, right. The staff has  
20 started their technical reviews. There are site  
21 visits to be conducted, audits, development of  
22 requests for additional information. And about April  
23 of next year the staff will owe us a preliminary draft  
24 SER, along with our RAIs. There are a whole series of  
25 milestones. They're not all on here. I just hit the

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1 highlights.

2 MEMBER SHACK: What is the FTE effort to  
3 make an early site permit?

4 MR. SCOTT: Steve, can you speak to that?

5 MR. KOENICK: It's roughly -- I guess we  
6 had forecasted a certain effort in our report several  
7 years ago. We are, I would say, roughly around the  
8 same -- give or take 10 percent -- from those values.

9 VICE CHAIRMAN WALLIS: Which were?

10 MR. KOENICK: Around 20.

11 VICE CHAIRMAN WALLIS: 20?

12 MEMBER APOSTOLAKIS: 21.

13 VICE CHAIRMAN WALLIS: 20 people?

14 MS. GILLES: 20 FTE.

15 VICE CHAIRMAN WALLIS: 20 people for a  
16 year?

17 MS. GILLES: 20 FTE over the 33-month  
18 schedule.

19 VICE CHAIRMAN WALLIS: Gee whiz.

20 MEMBER APOSTOLAKIS: And that does not  
21 include reviewing the seismic methodology itself, does  
22 it?

23 MR. SCOTT: Well, that will be part of  
24 this process, yes.

25 MEMBER APOSTOLAKIS: So it's part of the

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1 33?

2 MS. GILLES: 33 months, yes.

3 MEMBER APOSTOLAKIS: It is. So you had  
4 anticipated there would be new methodologies and --

5 MR. SCOTT: Well, we anticipated that  
6 seismic issues would be of significant importance,  
7 yes.

8 MEMBER APOSTOLAKIS: What does acceptance  
9 review complete mean?

10 MR. SCOTT: That just means that the staff  
11 has basically looked at the applications and  
12 determined that the applicant has provided reasonable  
13 information in each section. It's nothing more than  
14 that. It's a two-week review.

15 MEMBER ROSEN: It's a little puzzling to  
16 me, and it may be puzzling to lay people as well, why  
17 seismic issues on a site which already has units on it  
18 would be so central to this discussion. I mean, the  
19 earth isn't changed. Can you help me understand what  
20 has changed?

21 MEMBER APOSTOLAKIS: The methodology.

22 MR. SCOTT: Well, several things have  
23 changed. The methodology has changed. There's  
24 additional data. Research has continued to go on  
25 regarding the seismic hazards in general. I think

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1 Cliff Munson is going to step up and give us some  
2 additional information.

3 MR. MUNSON: We have since the -- excuse  
4 me, Cliff Munson, Civil Engineering. We have several  
5 -- additional information since the early plants were  
6 sited. We have information on ground motion, on  
7 seismic source size, recurrence, how often they  
8 happen, where they happen. All of this information  
9 has to get folded into this probabilistic seismic  
10 hazard approach, which is also a new approach.

11 MEMBER APOSTOLAKIS: But how would that  
12 affect, then, the existing reactor?

13 MR. MUNSON: Well, for early site permit  
14 work, we're determining a site SSE. That will not be  
15 used as a basis for design. Presumably they will  
16 choose a certified design, which already has a design  
17 spectrum. So right now we're just defining a site  
18 hazard SSE. Part 50 deals with the existing --

19 MEMBER APOSTOLAKIS: Yes. But what if  
20 this SSE is different from the SSE of the existing  
21 unit?

22 MR. MUNSON: Well, we have several  
23 reactors right now with different design spectra that  
24 were licensed at a later date.

25 MEMBER APOSTOLAKIS: The same --

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1 MR. MUNSON: The same site. We just have  
2 different spectra. So, I mean, it -- we just get new  
3 information. We have generally a higher spectra.

4 MEMBER APOSTOLAKIS: So this means that we  
5 have done it before.

6 MR. MUNSON: Yes, we have done it.

7 MEMBER APOSTOLAKIS: Is it logical? Is  
8 there a criterion that you have to pass in order to  
9 say this is okay?

10 MR. WILSON: This is Jerry Wilson.

11 MEMBER APOSTOLAKIS: It has to become an  
12 issue of adequate protection?

13 MR. WILSON: This is a situation that the  
14 staff faces from time to time, and it's basically  
15 we'll make a judgment as to whether new information is  
16 significant enough to cause us to go back and re-look  
17 and make some sort of a backfit decision. But as has  
18 been stated, we have had this situation in the past,  
19 and it's possible it could occur in the future.

20 We have to remember -- take ourselves back  
21 when we revised Part 100. Keep part of that revision,  
22 which was done in -- I believe it was '96 -- was that  
23 we change the methodology upon which we determined  
24 safe shutdown earthquakes.

25 And at that time, I think it was expected

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1 that at some point in the future, given new  
2 information about seismology and the new process, that  
3 you could end up with SSEs and response specters that  
4 are different than what they are at the existing  
5 plant. As has been said, it has happened in the past,  
6 and it is likely to happen in the future.

7 MEMBER APOSTOLAKIS: So it's really the  
8 backfit rule.

9 MR. WILSON: It will come into play if it  
10 was determined that we would do something. But you  
11 shouldn't assume that we would.

12 Go ahead.

13 MEMBER SIEBER: I can give you an example  
14 of two units that were built 13 years apart, one of --

15 MEMBER APOSTOLAKIS: Which site is this?

16 MEMBER SIEBER: My old site, Beaver  
17 Valley. And the first unit had a different seismic  
18 criteria than the second. And if you look at the  
19 plants, you'll see a difference in piping supports,  
20 and so forth. On the other hand, in the process of  
21 licensing Unit 2, we did a lot of backfits on Unit 1  
22 to take into account the revised seismic parameters.

23 MEMBER APOSTOLAKIS: And these backfits  
24 were imposed on you by the NRC, or you chose to do it,  
25 or both?

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1                   MEMBER SIEBER: Well, from the standpoint  
2 of engineering, you're required to meet the criterias.  
3 You do the backfit without somebody coming with a  
4 whip. I mean, that's the way professionals do  
5 engineering.

6                   MR. BAGCHI: My name is Goutam Bagchi. I  
7 just wanted to share some perspective with you. The  
8 backfit rule is relatively new. Some of those sites  
9 where the seismic requirements changed changed just  
10 incrementally.

11                  MEMBER SIEBER: That's right.

12                  MR. BAGCHI: However, here we are talking  
13 about a different process, different review  
14 requirement, and the site parameters may turn out to  
15 be substantially different from the one that was used  
16 for the design of an existing unit.

17                  But how do we assure ourselves that we  
18 have looked at some of these possibilities? I remind  
19 you of the IPEEE program in which we looked at review  
20 level earthquakes, which were substantially larger  
21 than the SSE. So we have evaluated the capability of  
22 plants to resist earthquakes bigger than the design,  
23 so please keep that in mind.

24                  MEMBER ROSEN: Well, is it also a  
25 possibility that this new review could lead to a

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1 earthquake magnitude and spectra that are less taxing  
2 than the original?

3 MR. BAGCHI: Please repeat that question.  
4 I'm not sure --

5 MEMBER ROSEN: Is it possible that the  
6 review that you're going to do here could lead to  
7 spectra for the site and maybe the site magnitude --  
8 the magnitude of the earthquake at the site, which  
9 would be less -- lower than the current numbers?

10 MEMBER APOSTOLAKIS: Could be.

11 MR. MUNSON: I have -- the site SSE is not  
12 going to be used for design. We'll come up with --  
13 they could come up with a site SSE that is lower than  
14 their current design basis for the site, but that will  
15 not be used for design. For design they will use a  
16 certified spectrum from AP -- for example, AP1000 or  
17 ABWR, or something like that.

18 MEMBER ROSEN: I'm just trying to --

19 MEMBER APOSTOLAKIS: I'm confused, though.  
20 I'm really confused.

21 MEMBER ROSEN: I'm just trying to  
22 understand the impact -- the possible impacts on the  
23 existing plants. One possible impact is clear, and  
24 Jack described it. We might decide to -- that the new  
25 information is useful and valuable and creates a need

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1 to do some backfit to the existing plant.

2 The other case seems to be just the  
3 opposite. You look at the new information and say,  
4 "Hmm. I guess we were a little bit overconservative  
5 in our existing plants. We really don't need all  
6 those supports and structural whatever, because the  
7 site is actually less seismically active and less --  
8 than we thought." And, therefore, there might be  
9 some --

10 MEMBER APOSTOLAKIS: No. But there is  
11 also a possibility that you will have different SSE  
12 for the two units and you do nothing about it.

13 MEMBER ROSEN: That's also possible, too.  
14 I just don't want to exclude our --

15 MEMBER APOSTOLAKIS: Yes. But isn't --

16 MEMBER ROSEN: -- and I'm asking somebody  
17 to tell me why it would be excluded, if it could be,  
18 that this --

19 MR. BAGCHI: Is there a public health and  
20 safety concern in that question of yours, sir?

21 MEMBER ROSEN: A public health and safety  
22 concern? Of course.

23 MEMBER APOSTOLAKIS: Well, I don't know.  
24 I don't know. And remember --

25 MR. BAGCHI: Well, I mean --

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1                   MEMBER APOSTOLAKIS: But remember, the  
2 fourth strategic goal of the Commission is public  
3 confidence. And this is not something that enhances  
4 that, if at the same site you have two units that have  
5 different design criteria. You have to explain it  
6 somehow.

7                   MR. BAGCHI: Right.

8                   CHAIRMAN BONACA: But it seems to me that  
9 assume that you have somewhat different design  
10 criteria for a new plant on the same site. Still, the  
11 information you have may not justify backfitting the  
12 previous plant.

13                   MEMBER APOSTOLAKIS: And I agree with  
14 that.

15                   CHAIRMAN BONACA: In fact, I mean, you  
16 have to think about it as if you had a new site, say,  
17 300 feet away, and you treat it independently of the  
18 first one. I mean, it -- there is a full -- there are  
19 full generations of plants that we are still operating  
20 right now that meet different requirements based on  
21 the knowledge that we had at that time, plus some  
22 considerations.

23                   MEMBER APOSTOLAKIS: Well, the issue is  
24 really how ethical Caesar's wife appears to be, not  
25 how ethical she is.

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1 MEMBER KRESS: No, I don't think so.

2 MEMBER APOSTOLAKIS: I think appearances  
3 are very important.

4 VICE CHAIRMAN WALLIS: I think I still  
5 like my question. As a member of the public, I asked  
6 you -- we asked you how many FTEs it took. I was  
7 expecting the answer might be something like one,  
8 because the technical issues cannot be all that  
9 complicated. You don't even have a reactor. You've  
10 got to do a lot of general stuff. You've got to look  
11 at seismic and environmental and risk in a general  
12 way.

13 And it would seem that the criteria for  
14 this already exists, and so the technical review  
15 cannot possibly take all that much. So are most of  
16 these people doing what I would call political  
17 bureaucratic activities?

18 MR. SCOTT: Let me speak a little bit to  
19 that. First of all, I would -- we didn't talk here of  
20 course about the environmental review, but that's a  
21 major portion of this. And the environmental review  
22 is performed to determine the effects of a reactor  
23 that might be built on the site on the environment,  
24 not the effect of the bare site itself. So they are  
25 -- on the environmental side of the house there's an

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1 extensive review required.

2 VICE CHAIRMAN WALLIS: And how complicated  
3 can that possibly be?

4 MR. KOENICK: This is Steve Koenick. With  
5 the environmental review, if you take license renewal  
6 for a model that is a defined task, and they had use  
7 of the generic -- the GEIS, which is the generic  
8 environmental impact statement, which actually just  
9 took away I think two-thirds of the environmental  
10 issues that they have to look at.

11 For this, it's a brand-new look at this  
12 site. They have to review all of the impacts  
13 associated with this review. So they have a better  
14 confidence of what it takes for them to perform that  
15 task.

16 On the safety side, we have not done the  
17 seismic review yet under this new regulation, and  
18 there's also the -- Jay Lee is performing the dose  
19 calculations, and then there's the other reviews  
20 associated with what's described in the review  
21 standard.

22 MR. SCOTT: For whatever it's worth, the  
23 North Anna ESP application is about like that. Okay?  
24 It's not a small amount of paper.

25 MEMBER SIEBER: Do they still do all of

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1 the things like the historical artifacts,  
2 archaeological things, population counts? There's a  
3 lot of information that --

4 MR. SCOTT: Most everything required by  
5 NEPA is in scope. There are certain exceptions.

6 MEMBER SIEBER: Right.

7 MR. SCOTT: But most everything is.

8 MEMBER SIEBER: And so the application is  
9 large.

10 MR. SCOTT: Yes, it is. It's -- the North  
11 Anna is five large volumes.

12 VICE CHAIRMAN WALLIS: It's mostly  
13 environmental stuff, is it?

14 MR. SCOTT: About 50/50. The seismic --  
15 as Steve pointed out, the seismic is -- there's a lot  
16 of analysis backing that up.

17 MR. WILSON: This is Jerry Wilson again.  
18 I just wanted to amplify and summarize some of this.  
19 That in addition to the full scope environmental  
20 review, the site characteristics are a very important  
21 part of our review process. And I'd go back to our  
22 construction permit reviews. This is always  
23 significant.

24 And so remember you're reviewing  
25 meteorology seismology, hydrology seismology, all --

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1 certain independent reviews are associated with all of  
2 that. And it takes time, and we want to be sure we  
3 have good decisions, because it affects the overall  
4 safety of a plant at a site. So I don't think these  
5 review times are unusual, and the review scope is  
6 unusual either.

7 MEMBER ROSEN: I'd like to come back to  
8 the question I asked, because I want you to understand  
9 what I'm left with after that discussion about seismic  
10 design. I'm left with the implication, because I  
11 think the question wasn't really answered --

12 MR. WILSON: Okay.

13 MEMBER ROSEN: -- that no matter what  
14 happens the site characteristics for seismology will  
15 be more stringent than they were in the past. I don't  
16 think that's the right answer. I think the --

17 MR. WILSON: Now, and --

18 MEMBER ROSEN: That needs to be -- it  
19 needs to be open. It needs to be -- it could be less  
20 or it could be more, depending on what you find.

21 MR. SCOTT: And that's the case. I don't  
22 recall anyone having said that. Go ahead.

23 MR. MUNSON: We're defining a site hazard  
24 that could be any -- it could be less than the current  
25 existing DBE spectra. It could be higher than the

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1 current DBE spectra. It could be anywhere. The site  
2 hazard is -- will not be used for design of these new  
3 reactors in particular. If they go to the COL stage,  
4 they'll have a certified design spectra that they'll  
5 use.

6 MEMBER SHACK: As long as that certified  
7 design spectra --

8 MR. MUNSON: Envelopes the --

9 MEMBER SHACK: -- envelopes the site.  
10 He's not going to downgrade his design just because he  
11 walks into a site that -- you know, so, I mean, he's  
12 got a package, and the hope is that the package will  
13 fit on the site.

14 CHAIRMAN BONACA: It will meet the  
15 requirements of --

16 MEMBER SHACK: Exactly. So to that  
17 extent, you know, as long as it fits the envelope,  
18 he's sort of done.

19 CHAIRMAN BONACA: And they would expect,  
20 you know, given what we have seen for these new  
21 designs, I mean, that --

22 MEMBER SHACK: They were pretty robust.

23 CHAIRMAN BONACA: -- they were robust.  
24 They will exceed --

25 MR. MUNSON: One of the PPEs is, in fact,

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1 a design spectra.

2 MEMBER ROSEN: What I'm thinking about is  
3 the impact on the existing plants of this discussion.  
4 Jack talked to us about the impact in one case -- at  
5 Beaver Valley -- of what was done. And I'm thinking  
6 asking is there a converse, and then I guess the  
7 answer to that is now, yes, that one could come up  
8 with --

9 MEMBER SIEBER: Do you mean where you  
10 would --

11 MEMBER ROSEN: -- with a site hazard which  
12 is lower than what you came up with for the existing  
13 plants.

14 MEMBER SIEBER: But you wouldn't spend  
15 money modifying the plant to downgrade its capability.  
16 I mean, you just thank your lucky stars and march off.

17 MEMBER ROSEN: I'm not drawing any  
18 conclusion at all about what the licensee of the  
19 existing plants might do. I'm only asking whether  
20 it's possible that you might come up with a hazard  
21 that's less than the existing plants, and the answer  
22 I think finally I'm dragging out of you guys is yes.

23 MR. SCOTT: But you'd have to say yes that  
24 you could get a number at a -- that's lower at a site  
25 that's some yards down the street from where the

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1 existing reactor is. So then not only would you have  
2 -- if you wanted to take advantage of that, you'd have  
3 to do another analysis for the site where your  
4 existing reactor is, and then spend the money like  
5 you're talking about to modify the plant.

6 So I guess I would assume that it's not  
7 going to be all that useful an exercise for the  
8 existing licensees.

9 MEMBER SIEBER: Just out of curiosity,  
10 where does the wind blow more than 300 miles an hour?

11 MR. SCOTT: There are regions in the  
12 midwest where the reg. guide wind speed is 330.

13 MEMBER SIEBER: 330, whew.

14 VICE CHAIRMAN WALLIS: Has it ever been  
15 recorded, though, at that height -- that speed?

16 MR. SCOTT: I can't answer that. Leta  
17 Brown, are you here? She had -- yes. Did you hear  
18 that question?

19 MS. BROWN: Yes. I'm Leta Brown. I  
20 wouldn't say that the wind speed has been measured,  
21 but we're looking at a  $10^{-7}$  probability of occurrence.  
22 So this is an estimated value, and there are some  
23 places where according to the current data we have,  
24 and analysis we have, we do estimate there could be  
25 some areas where a  $10^{-7}$  probability of occurrence

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1       could be --

2                   MEMBER APOSTOLAKIS:       So that's an  
3       extrapolation.

4                   MS. BROWN -- more than 300 miles per hour.

5                   MEMBER APOSTOLAKIS:       Are you  
6       extrapolating?

7                   MR. SCOTT:    So no one is challenging  
8       the --

9                   VICE CHAIRMAN WALLIS:    So you're not  
10       challenging the Mount Washington record of 254 miles  
11       an hour, whatever it was, that was measured there?  
12       And that wasn't even a tornado.

13                   MR. SCOTT:    But we don't have 10<sup>7</sup> years of  
14       data, so I guess we have to --

15                   (Laughter.)

16                   -- have to extrapolate.

17                   MEMBER APOSTOLAKIS:    Good. All right.

18                   MR. SCOTT:    To conclude, the staff has put  
19       a significant effort into preparing for evaluation of  
20       these applications. They are first of a kind. There  
21       is very limited precedent. You could go back to the  
22       '70s and say we did some early site reviews back then,  
23       but they're not in the same scope of this, a different  
24       regulatory framework.

25                   So we're challenged to review these three

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1 applications effective, efficiently, and consistently,  
2 and we are -- the review standard, of course, is part  
3 of the plan that we put in place to do that. The  
4 three applications the applicants have attempted to  
5 address without precedent are regulations, and so we  
6 have gotten a variety of applications, if you will.  
7 They don't all look the same.

8           So we are working with that, and we're  
9 learning a lot of lessons already, and we will be  
10 factoring those into future revisions of RS-002. We  
11 also are developing a process by which we can  
12 incorporate interim staff guidance similar to the  
13 process that's in place for license renewal.

14           So between RS-002 revisions we can add  
15 additional guidance, put it out for public comment,  
16 and incorporate it.

17           And that concludes the prepared remarks,  
18 subject to your questions.

19           MEMBER KRESS: Okay. I'll open up the  
20 floor for any additional comments or questions from  
21 the members.

22           You know, I think you have a good review  
23 standard. The only thing that bothers me -- and it's  
24 not part of the review standard, I don't think -- but  
25 I wish there was some criteria in which we could say

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1 you cannot have any more than this many reactor units  
2 at a given site.

3 And I don't think anything like that --  
4 you know, it's not practical because I'm sure Jerry  
5 would go through this exercise, and if it gave -- put  
6 into question adequate protection of the public or  
7 something like that, they don't --

8 MR. WILSON: Let me respond to that. This  
9 is a potential question for the future, because  
10 remember in our discussions with Exelon on the pebble  
11 bed design they were contemplating at one point siting  
12 10 reactors at one site. And so we started to think  
13 about that, and at some point it's possible that we  
14 may be faced with that question. And we have to ask,  
15 do we have a concern with integrated risk?

16 MEMBER KRESS: That's exactly the concern,  
17 yes.

18 MR. WILSON: I mean, from the -- we  
19 haven't drawn a conclusion.

20 MEMBER KRESS: That ought to be a  
21 consideration in early site permits.

22 MR. WILSON: It's an issue that we've only  
23 had preliminary discussions. From the perspective of  
24 society, society doesn't care if you have 10 sites  
25 with one reactor at each site, or one site with 10

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1 reactors.

2 MEMBER KRESS: But the people right around  
3 it does.

4 MR. WILSON: Yes. Farmer Brown living  
5 next door, he may care. And so we as an agency would  
6 have to confront that if that situation ever arose.  
7 Right now we're only talking about sites with three  
8 reactors at a site, and it's not really an issue.

9 MEMBER KRESS: I know. It's not a  
10 practical issue yet. In principle it's an issue.

11 MEMBER SIEBER: In that case, LRF is  
12 added, too, amongst the --

13 MEMBER KRESS: Yes, that might be the way  
14 to look at it.

15 MEMBER SIEBER: On the other hand, the  
16 source term is not cumulative, because you're only  
17 going to have an accident at one unit at a time  
18 hopefully.

19 MEMBER KRESS: That's right.

20 VICE CHAIRMAN WALLIS: Well, I remember in  
21 the early days of nuclear power there were -- some of  
22 the leaders were advocating that you have a few sites  
23 with many reactors in remote areas rather than  
24 spreading them all over the country, and that would be  
25 better.

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1                   Now, the implication here seems to be that  
2                   it's bad to have a lot of reactors on one site.

3                   MEMBER SHACK:   Only for Farmer Brown.

4                   VICE CHAIRMAN WALLIS:   Well, that's  
5                   because it's a very peculiar criterion.

6                   MR. SCOTT:   Weren't they going to put 10  
7                   at Palo Verde at one point?

8                   MEMBER SIEBER:   Yes, a lot.

9                   CHAIRMAN BONACA:   There are examples in  
10                  Japan and France of many, many plants at one site.  
11                  And there are other aspects I think, you know, in  
12                  part. I mean, if you have a large facility with an  
13                  invested -- a lot of investment on many units,  
14                  probably you have a strong engineering group behind  
15                  that. Probably you have a strong organization behind  
16                  that. Probably you have -- maybe you have a better  
17                  capable organization onsite. So it's a complicated  
18                  issue.

19                  MR. SCOTT:   And the other thing is if you  
20                  were going to put 10 large nuclear powerplants on a  
21                  site, there are -- I would suspect there are a paucity  
22                  of areas in the eastern United States where you'd find  
23                  that much land.

24                  MEMBER KRESS:   You'll probably end up with  
25                  land problems and restrictions on the environmental

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1 impact that would stop it, too.

2 MR. SCOTT: Certainly I don't believe  
3 these applicants are contemplating anything like that.

4 MEMBER KRESS: Do they specify the number  
5 of plants in the early site area?

6 MR. SCOTT: What they are specifying in  
7 their applications are, of course, the PPE parameters  
8 such as thermal power.

9 MEMBER KRESS: Oh, okay.

10 MR. SCOTT: So now that thermal power can  
11 be obtained, for example, by one or say two AP1000s,  
12 four gas reactors, etcetera.

13 MEMBER KRESS: Thank you very much. If  
14 there's no more questions, I --

15 MEMBER SHACK: Just to come back -- I  
16 mean, so they are talking about multiple units, on the  
17 order of two or three.

18 MR. SCOTT: Well, yes. The way North Anna  
19 did it, that's the one I'm most familiar with, they  
20 specified that they are talking about North Anna  
21 Units 2 -- or, I'm sorry, 3 and 4. Now, Unit 3 might  
22 be one AP1000 or some larger number of gas-cooled  
23 reactors. I don't remember the number, but it's more  
24 than one. So it's that kind of thing.

25 Now, in the end, of course, what they are

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1 giving us to look at is the PPE, which would have the  
2 total thermal output and that sort of thing.

3 MEMBER SHACK: But the total would  
4 encompass perhaps more than the one unit.

5 MR. SCOTT: Yes. In some cases definitely  
6 it would, yes.

7 MEMBER KRESS: Okay. Well, thank you very  
8 much.

9 MR. SCOTT: Thank you. Good.

10 MEMBER KRESS: We look forward to see how  
11 this system works in the final --

12 MR. SCOTT: We'll be back to talk to you.

13 MEMBER KRESS: Thank you.

14 Back to you, Mr. Chairman.

15 CHAIRMAN BONACA: Thank you. Okay. Since  
16 we have some time before the break, ahead of time --

17 MEMBER KRESS: I forgot to mention that  
18 there may be members of the public or NEI that might  
19 want to comment. I don't know that there are.

20 MR. BELL: This is Russell Bell with NEI,  
21 and I would just commend the staff for their efforts  
22 on the review standard. I think it was a needed and  
23 worthwhile effort to try and anticipate the reviews.

24 The NEI task force on early site permits  
25 will continue as a going concern throughout the

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1 staff's review of the pilot applications. We expect  
2 a number of the issues and requests for additional  
3 information to be generic in nature, and that a  
4 generic response might be the most efficient way to  
5 proceed.

6 So, and we appreciate that -- a full  
7 understanding of how this is going to work, in terms  
8 of the ESP reviews, is going to necessarily weight  
9 actual experience with these pilot applications.

10 And I'm not sure Mike mentioned it today,  
11 but in the past he has mentioned that the review  
12 standard would be revised later on to reflect some of  
13 that experience. I would appreciate that.

14 The only specific comment I might add is  
15 in the area of the dose consequence analyses, which is  
16 an area where we have disagreed on a generic level  
17 with the staff. It's true, the pilot applicants -- we  
18 agreed with the staff on a workaround for the more  
19 fundamental issues. So, indeed, they are providing  
20 generalized dose consequence analyses with their  
21 applications.

22 We don't think that's the optimal  
23 solution, since these are generalized analyses. We  
24 don't believe -- Mike said the rules are clear. I  
25 think it's clear to the staff the rules require

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1 complete dose analyses, but I'm not sure that's  
2 exactly what the rules say.

3 If the rule is the problem, we should  
4 perhaps address the rule, and I guess that's the point  
5 I wanted to get to. There is opportunity in the  
6 pending Part 52 rulemaking that's going on right now  
7 to clarify certain things that may not be clear enough  
8 with respect to requirements in this area. And,  
9 indeed, we've made a specific recommendation as part  
10 of that rulemaking to clarify the rules in this area.

11 It's no surprise that there's -- perhaps  
12 that there's confusion. The regulations for early  
13 site permit refer to 50.34(a)(1), which is for a  
14 construction permit and operating license scenario.  
15 So you'll find very often that the words and  
16 requirements for a CPOLE don't quite make sense when  
17 you're talking ESP COL.

18 Some of the -- even Part 52.17(a)(1)  
19 borrows language directly from 50.34, and inserts it  
20 in Part 52. This was done years ago as -- now we have  
21 experience with how ESPs actually might come down the  
22 pike, and our sense is we can clarify the requirements  
23 in this area.

24 So I would just -- I believe the  
25 rulemaking would also be on the committee's radar

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1 screen, and to be looking for that. We'll connect  
2 that dot with the dot we draw today.

3 But we did not agree with everything in  
4 terms of our generic interactions with the staff, but  
5 we found them very productive. And, again, I'd come  
6 back and close with commending the staff for a fine  
7 job.

8 Thank you for the opportunity. I'm sorry  
9 to extend --

10 MEMBER KRESS: Thank you for those  
11 comments.

12 MR. BELL: -- the session.

13 MEMBER KRESS: We'll look for the  
14 rulemaking, and we'll keep this item.

15 MR. BELL: Thanks, Dr. Kress.

16 MEMBER KRESS: I have a note that --

17 MR. BELL: Okay.

18 MEMBER KRESS: Now you can have it back.

19 CHAIRMAN BONACA: All right. Well, I  
20 think then we'll take, oh, about 10 minutes. I could  
21 have gone through my Ginna license renewal report, and  
22 I think I'll do that, because it will take just a few  
23 minutes.

24 Thank you very much.

25 MEMBER SHACK: That's the smallest one

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1 we've seen.

2 CHAIRMAN BONACA: It's the smallest one we  
3 have seen. Started up in 1969, so it's really one of  
4 the very early plants. And, in fact, it's a very  
5 interesting plant because it started before the  
6 general design criteria were established. Therefore,  
7 it was subjected to the systematic evaluation program  
8 that all of those plants of the generation have to go  
9 through.

10 Now, to describe how significant that  
11 program was, you know, there were some plants in that  
12 group that literally started without an emergency  
13 cooling system. It was backfitted.

14 So now Ginna actually had all of these  
15 systems available, and when we reviewed it we asked a  
16 number of questions relating to the plant itself, so  
17 we could understand two things -- one, how the plant  
18 is effective and built, and the other one is, in fact,  
19 for all of those systems which were really brought in  
20 by the systematic evaluation program, which is no  
21 systems that -- however, were credited for -- to make  
22 up the deficiencies for not meeting the GDCs. Were  
23 they in scope or not? And the answer was, yes, they  
24 were consistently in scope.

25 The other thing we looked at was some of

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1 these plants clearly did not have -- some systems were  
2 not as capable as they were supposed to be, so  
3 something was made up. And compensating factors were  
4 not as effective in some cases as in others. For  
5 Ginna, I believe that they were -- they addressed the  
6 issue of SEP in a very thorough fashion.

7 For example, a typical weakness of the  
8 early plants was level of redundancies and  
9 independence of the auxiliary feedwater systems.  
10 Ginna itself has two trains that are vulnerable to  
11 extended events, because the wall separating the two  
12 trains could collapse under an extended event and  
13 cause common mode failure of both trains.

14 And it's interesting to see how they  
15 address this issue. They address it by adding two  
16 trains of auxiliary feedwater in a different location,  
17 motor-driven pumps, 100 percent capable each. So you  
18 have a plant actually that has a very strong auxiliary  
19 feedwater system. So that was kind of positive.

20 MEMBER KRESS: Can they have a PRA?

21 CHAIRMAN BONACA: They have a PRA. They  
22 have a pretty aggressive PRA -- user PRA in support of  
23 the plant. They use it to manage the -- configuration  
24 manage.

25 It was also interesting to see how

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1 proactive they have been. They have replaced the  
2 steam generators with the 690 TT materials. They have  
3 replaced this October the reactor head with the 690 TT  
4 materials.

5 MEMBER SHACK: Despite being a cold head  
6 plant. That's really --

7 CHAIRMAN BONACA: As a cold head -- so  
8 loss of coolability, no evidence of any leakage, and  
9 yet they replaced the head already. And they also  
10 gave us pictures of the inspections of the lower head  
11 of the vessel. It was clean. The plant looked in  
12 good physical condition. I think from that  
13 perspective it was positive, very positive.

14 MEMBER SHACK: Let me make one comment if  
15 I can, Mario --

16 CHAIRMAN BONACA: Yes, sure.

17 MEMBER SHACK: -- about the replacement on  
18 the insulation on the lower head. They actually  
19 replaced the insulation with standoff insulation, so  
20 that they had better access in the future.

21 CHAIRMAN BONACA: Yes.

22 MEMBER SHACK: I thought that was  
23 impressive.

24 CHAIRMAN BONACA: Yes.

25 MEMBER KRESS: Is this reflective

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1 insulation?

2 MEMBER SHACK: I think so. Whatever. You  
3 could now see -- you can take a picture -- there's a  
4 picture of it. You can --

5 CHAIRMAN BONACA: And I think, you know,  
6 I want to say that --

7 MEMBER KRESS: Where is Ginna located? I  
8 don't know.

9 CHAIRMAN BONACA: It's on Lake Ontario.

10 MEMBER SIEBER: Lake Ontario.

11 MEMBER KRESS: Oh.

12 CHAIRMAN BONACA: It's around Rochester.

13 MEMBER SIEBER: New York.

14 MEMBER KRESS: It's probably a good site.

15 CHAIRMAN BONACA: Yes.

16 MEMBER SIEBER: Cold.

17 MEMBER KRESS: Cold and not much  
18 population.

19 CHAIRMAN BONACA: I think what was  
20 encouraging about Ginna is that, you know, we always  
21 talk about license renewal. Everything is hanging in  
22 programs. Here we have a plan that is older, and yet  
23 you can see how effectively it has been maintained and  
24 supported, and I think it was encouraging to see that  
25 they really had prepared this plant for license

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1 renewal. I mean, physically the changes, they are  
2 done --

3 MEMBER SHACK: Of course, the steam  
4 generators really went to hell before they placed  
5 them.

6 CHAIRMAN BONACA: I know. I know.

7 (Laughter.)

8 Insofar as the license renewal process,  
9 they used a GALL process. There were -- by the time  
10 we reviewed this plant there were eight open items.  
11 I believe that they are down to a couple of them. The  
12 rest are pretty much being closed.

13 There were a number of exceptions on the  
14 GALL processes, in part because they have a plant-  
15 specific program that makes up for those. The  
16 interesting thing was, again looking at an older  
17 plant, we paid attention quite carefully on the TLAAs  
18 and the requalification of components, realizing that  
19 this plant is going to reach its 40 years of operation  
20 in 2009.

21 And we found that there was significant  
22 margin that we -- at least it was undeclared, and we  
23 had -- for where there were statements of margin, we  
24 asked them to provide us quantitatively those margins  
25 at the full committee meeting. And wherever they

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1 presented those numbers there was significant margin  
2 -- for the vessel, for the internals from a  
3 perspective of -- for example, fatigue, metal fatigue.

4 And so, in general, we really didn't have  
5 many open issues that were raised regarding this  
6 plant. We felt that it was in pretty good shape.

7 Some of the comments of the members at the  
8 end of the meeting were importance for us to have  
9 quantitative information, and maybe for the next  
10 application an example of how deeply this stuff went  
11 into an issue, a quantitative set of issues so that we  
12 have a better perspective of, you know, how to  
13 determine that one-time inspection was adequate,  
14 rather than, you know, a system program to deal with  
15 a certain issue.

16 But beyond these points, I think that we  
17 didn't have any further comments. I believe this is  
18 -- this plant is in good shape.

19 MEMBER ROSEN: All green.

20 CHAIRMAN BONACA: All green, by the way,  
21 in the ROP.

22 MEMBER LEITCH: One thing that I thought  
23 was interesting was that they stated pretty clearly  
24 that the plant is for sale. And one of the  
25 prerequisites for the sale is the obtaining of the

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1 license renewal.

2 CHAIRMAN BONACA: Yes.

3 MEMBER LEITCH: And so I guess as they see  
4 the sequence of events is this process will be  
5 completed, they'll get the license renewal, and then  
6 put the for sale sign out.

7 CHAIRMAN BONACA: That's right.

8 MEMBER LEITCH: And that's pretty clearly  
9 their intention.

10 MEMBER SIEBER: Well, this is the last  
11 non-merchant plant left in Region I.

12 CHAIRMAN BONACA: I'm sorry?

13 MEMBER SIEBER: This is the last non-  
14 merchant plant left in Region I.

15 CHAIRMAN BONACA: Okay. I didn't know  
16 that.

17 MEMBER SIEBER: I have a question. I'm  
18 not part of that subcommittee, but I did read the  
19 application and the SER. There were some  
20 metallurgical indications that were discussed. One of  
21 them I think was in the reactor coolant system safe  
22 end piping. The other one was the shell to bottom  
23 head of the pressurizer.

24 And I noted when I read that that the  
25 indications in both cases had been seen at pre-service

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1 and also at an in-service inspection, but they were  
2 characterized differently from the pre-service to the  
3 in-service. That's not surprising to me, because the  
4 techniques are better today than they were 30 years  
5 ago.

6 On the other hand, my question is, does  
7 the staff have a qualified Level 3 inspector, equal to  
8 the person who makes the original characterization in  
9 qualification, to be able to make a judgment whether  
10 these indications were characterized by the licensee  
11 properly or not.

12 CHAIRMAN BONACA: Yes.

13 MEMBER SIEBER: And perhaps --

14 CHAIRMAN BONACA: I don't have any answer  
15 to that question.

16 MEMBER SIEBER: Yes. But maybe somebody  
17 could write it down and ask it the next time we meet  
18 with the staff.

19 CHAIRMAN BONACA: If you could, you  
20 know --

21 MEMBER SIEBER: I have --

22 CHAIRMAN BONACA: -- write down a little  
23 note for me, and then I'll make sure that we ask that  
24 question.

25 MEMBER SIEBER: I'll do that.

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1 CHAIRMAN BONACA: And, of course, they  
2 will come before the full committee meeting at some  
3 point. And I think we should pursue that.

4 MEMBER SIEBER: If we don't get it until  
5 then --

6 CHAIRMAN BONACA: We could do it before.  
7 We've asked that question before.

8 MEMBER SIEBER: Yes.

9 MEMBER FORD: Mario, we do have a  
10 procedural problem, which you are seeing in all of  
11 these, is how on earth do we convince the staff to  
12 give quantity to justifications of their approvals.  
13 Because we are essentially taking it as a given, yet  
14 every time we ask them to go into detail, you get a  
15 horrible question mark as to how deeply they have gone  
16 into their evaluation.

17 MEMBER SHACK: And I don't know how you  
18 convince them.

19 MEMBER FORD: Yes. But in what -- the  
20 launching programs --

21 MEMBER SHACK: Well, no, some of them are  
22 pro forma like 50 foot pounds, and whatever it might  
23 be. But the justification that the staff gave to  
24 support the applicant's assertion that one time is no  
25 good -- for instance, that is one. And we asked them

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1 this time, what was your justification to the staff?  
2 What's your justification?

3 Essentially, they said, "Well, because the  
4 applicant said so." That's not a good --

5 CHAIRMAN BONACA: Well, they based it on  
6 operating experience, because we asked that question,  
7 you know, how do you project -- but the issue is  
8 always that they have had 30 years of operation, and  
9 there was no evidence of degradation tied to that.  
10 Therefore, that justified just one-time inspection.

11 Now, the logic we have used is that's true  
12 that past doesn't tell you everything about the  
13 future. However, the -- but there is no reason to  
14 believe that, for example, the issue of non-aggressive  
15 groundwater, okay, they have a very low aggressive  
16 groundwater that, combined with the fact that they  
17 have no findings of certain structures, would justify  
18 one-time inspection, because you have the combination  
19 of non-aggressive groundwater and no findings in the  
20 past.

21 And the expectation would be that when you  
22 do the next inspection, the one-time inspection, that  
23 would confirm that there is no further degradation.

24 Now, on some issues there are other  
25 considerations that -- at least in my judgment that

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1 they use to say, yes, it's acceptable. For example,  
2 if you have a tank, a diesel tank, where, you know,  
3 the history is that there has been no degradation, and  
4 they are going to perform a one-time inspection to  
5 confirm that, in case there was a leak in the tank,  
6 would it be catastrophic in the sense of affecting the  
7 immediate safety of the powerplant?

8 I don't think so, because you would have  
9 probably slow leakage. You would monitor it, you will  
10 find it, and then you will have a corrective action,  
11 which would be pretty urgent, because tech specs force  
12 you to maintain inventory for --

13 MEMBER FORD: But you're saying, well, the  
14 staff should --

15 CHAIRMAN BONACA: Yes.

16 MEMBER FORD: -- that's exactly my point.

17 CHAIRMAN BONACA: I know. But, you know,  
18 I have to make an acceptance judgment.

19 MEMBER FORD: But the staff should be  
20 saying what you're saying. That's exactly my point.

21 CHAIRMAN BONACA: Yes. But I'm saying  
22 when I review it and I find four one-time inspections,  
23 I look for those characteristics. And when I find  
24 them, I don't ask further questions, because although  
25 I know they should answer the question their way, but,

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1 you know, I mean, and when they don't and there is  
2 urgency from the problem -- what I mean by urgency is  
3 that if you had, in fact, a throughwall hole, it would  
4 be a big problem. Okay? Then, I think it is up to us  
5 to raise the question at that point.

6 Now, I didn't see any of these one-time  
7 inspections that committed to being in that category.

8 MEMBER FORD: I see my role in these  
9 evaluations is to be defending the public. The public  
10 can say, well, here is somebody who is asking  
11 penetrating questions as to how well did the staff do  
12 their evaluation? And that's why I'm bringing it up.  
13 I'm not hearing that good -- I don't get that good  
14 feeling when I ask the staff this.

15 CHAIRMAN BONACA: Well --

16 MEMBER FORD: I get a good answer from  
17 you, and from you other guys who have operated plants.  
18 Yes, I can hear those justifications.

19 MEMBER ROSEN: Well, we got a terrible  
20 answer on off-the-shelf energy. And we pressed them  
21 harder and harder and harder, and all they could say  
22 was it's less than 50 foot pounds. Well, how much  
23 less? They simply couldn't tell us.

24 MEMBER SHACK: Yes. But when we --

25 MEMBER ROSEN: So did they know, really?

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1 I don't know.

2 MEMBER SHACK: Well --

3 MEMBER ROSEN: But if it's less than 50  
4 foot pounds, they have to have done an equivalency  
5 analysis.

6 MEMBER SHACK: Right.

7 CHAIRMAN BONACA: The presentation is  
8 being made as part of the management. It is not  
9 knowledgeable on the details. Now, when we get --  
10 what's her name? Elliot? When we get Elliot, then  
11 Elliot gives us the answer. So to me it shows that,  
12 yes, I mean, there is also the logistics of the whole  
13 thing. They have five weeks of inspections at the  
14 site with a team of people, a lot of looking into it.

15 Then, they have technical staff  
16 identifying and reviewing different issues. Then, you  
17 have a project manager here that is not knowledgeable  
18 with the details of -- the technical details giving us  
19 a presentation.

20 So at times it's the logistics of the  
21 presentation that doesn't provide the information.  
22 I'm not trying to defend it. I'm only explaining why,  
23 you know, I feel comfortable with the one-time  
24 inspection. I reviewed them all, and I find that,  
25 again, on the tanks, for example, the significance is

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1 not such that it will not be appropriate, because,  
2 again, if you find now 40 years -- you do the  
3 inspection, and you find no further -- that confirms  
4 the history of 40 years of success.

5           Conversely, if there was a surprise and  
6 something leaked later on, well, they monitor that  
7 thing all the time. There will be plenty of time to  
8 shut down the plant, because they can't run the plant  
9 without an inventory of diesel. Fix it and restart  
10 it.

11           So, and then at that point they will have  
12 to have a corrective action program, including a  
13 program of inspection. But that's --

14           MEMBER SHACK: Well, I mean, the other  
15 thing is, you know, it's not just 40 years at that  
16 plant. But if its escape means that the overall  
17 industry experience indicates --

18           CHAIRMAN BONACA: That's right.

19           MEMBER SHACK: -- that, you know, there  
20 hasn't been a problem, so you're really looking at a  
21 much larger database --

22           CHAIRMAN BONACA: Absolutely. That's the  
23 other issue.

24           MEMBER SHACK: -- than one plant.

25           CHAIRMAN BONACA: Yes.

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1 MEMBER SHACK: I mean, GALL is intended to  
2 integrate that service experience --

3 CHAIRMAN BONACA: Yes.

4 MEMBER SHACK: -- for many plants.

5 CHAIRMAN BONACA: Yes.

6 MEMBER SHACK: You know, but when you ask  
7 them for a quantity or a number, I can understand why  
8 they said, you know, if you haven't got any failures  
9 and you've had success, it's hard to put --

10 CHAIRMAN BONACA: That's right. That's  
11 right.

12 Okay. Any other questions on Ginna? With  
13 that, let's take a break until 10:25.

14 (Whereupon, the proceedings in the  
15 foregoing matter went off the record at  
16 10:09 a.m. and went back on the record at  
17 10:26 a.m.)

18 CHAIRMAN BONACA: We're back on. We're  
19 going to hear from the operating experience task  
20 force.

21 Mr. Sieber, you wanted to --

22 MEMBER SIEBER: Yes. I just wanted to  
23 take about 30 seconds of our time here to make a  
24 correction to something that was said in the Reg.  
25 Guide 1.32 Rev 3 meeting on Wednesday. And it was a

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1 question that was asked by Graham Leitch, and the  
2 question was, is the main unit generator a Class 1E  
3 machine?

4 And I said no. Somebody else said yes.  
5 Satish Aggarwal, who was giving the speech, said yes.  
6 And another staff person said no. And now --

7 (Laughter.)

8 PARTICIPANT: Do you want us to average  
9 all of that or --

10 (Laughter.)

11 MEMBER SIEBER: Well, here's the real  
12 answer. I did get a letter that says no. So if that  
13 answers your question Graham --

14 MEMBER LEITCH: Yes. Thank you, Jack.

15 MEMBER SIEBER: The main unit generator is  
16 not a 1E machine.

17 MEMBER LEITCH: Okay.

18 MEMBER SIEBER: And not part of the  
19 emergency power supply.

20 CHAIRMAN BONACA: All right.

21 MEMBER SIEBER: What we're going to do now  
22 is to look at the operating experience task force  
23 report, and this report is basically similar to a  
24 report -- it's one element of the Davis-Besse lessons  
25 learned task force, and it has some implications that

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1 go all the way back to 1980 when NUREG 0737 was issued  
2 following the TMI accident.

3 And the question back at the TMI phase was  
4 there was a precursor event at Davis-Besse, and had  
5 operating experience been used perhaps the TMI  
6 accident might not have occurred or been ameliorated  
7 somehow. And so part of the lessons learned task  
8 force from TMI was this task action plan, and out of  
9 that came AEOD and the staff requirements and licensee  
10 requirements to review and incorporate operating  
11 experience.

12 Now we have had another incident that has  
13 created another lessons learned task force from Davis-  
14 Besse. And one of the recommendations from that was  
15 to create an operating experience task force to review  
16 what the agency is now doing and should be doing to  
17 improve the dissemination and use of operating  
18 experience.

19 We are not expected to write a letter on  
20 this. It's included -- the information is included in  
21 Tab 15 of your books, and the task force report was  
22 previously sent in the mail. And Charles Ader is the  
23 task force manager, and he's been here many times  
24 before. And I'll let him go through --

25 MEMBER APOSTOLAKIS: Why does it say here

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1 Rosen? Is that a mistake?

2 MEMBER ROSEN: Yes, it's a mistake -- the  
3 first one ever made by the staff.

4 MEMBER SIEBER: What's a mistake?

5 MEMBER APOSTOLAKIS: The cognizant member  
6 is Steve Rosen. Evidently, he's not.

7 MEMBER SIEBER: That's correct.

8 MEMBER APOSTOLAKIS: Okay.

9 MEMBER SIEBER: Well, Steve is very  
10 knowledgeable.

11 MEMBER APOSTOLAKIS: He's cognizant.

12 MEMBER SIEBER: But I'm responsible.  
13 Okay. And that's not saying Steve is not responsible.

14 (Laughter.)

15 MEMBER ROSEN: I have no comment.

16 MR. ADER: Thank you, Jack.

17 Again, for the record, my name is Charles  
18 Ader. I'm the task force manager for the operating  
19 experience task force. My real home is in the Office  
20 of Research, but for the last six months this has been  
21 pretty much the main focus that I've been involved  
22 with.

23 As you remember, I was here in May to give  
24 the committee an overview of the task force, the  
25 charter, where we were going at that time. It was an

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1 easier briefing, because I could always promise that  
2 I'll answer the questions later. I guess I'm at the  
3 stage now that we have the task force report, and I  
4 did agree then to come back and brief the committee  
5 after we had completed the draft report. So that's  
6 why I'm here.

7 The next few slides are going to be some  
8 repeats of what you saw in May. But just to set the  
9 background and refresh your memory, I want to go  
10 through them, but I don't want to spend a lot of time  
11 on them.

12 The charter of the task force was to  
13 evaluate the agency's reactor operating experience  
14 program, and I'll emphasize reactor operating  
15 experience. We did not venture into the materials  
16 operating experience area, because NMSS has its own  
17 effort to look at that. So we were focusing on the  
18 reactor arena. And we were looking specifically at  
19 trying to address two of the recommendations from the  
20 Davis-Besse lessons learned task force.

21 MEMBER APOSTOLAKIS: Is this any different  
22 from what is known in general as organizational  
23 learning? Are you familiar with those terms?

24 MR. ADER: To some extent, yes.

25 MEMBER APOSTOLAKIS: It's the same thing.

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1 I mean, how does an organization learn from whatever  
2 experience is relevant to it.

3 MR. ADER: Yes. And that's what -- I'll  
4 touch on it a little bit later.

5 MEMBER APOSTOLAKIS: Okay.

6 MR. ADER: It's the feedback into the  
7 process is -- is something that we think is important.

8 MEMBER APOSTOLAKIS: Absolutely.

9 MR. ADER: Yes. The first Davis-Besse  
10 recommendation was a multi-part for us to look at  
11 evaluating agency's capability to retain operating  
12 experience thresholds for generic communication,  
13 opportunity to gain efficiencies or effectiveness, and  
14 we focused more on effectiveness in this one as  
15 opposed to efficiencies.

16 As we went through it, we didn't see a lot  
17 of areas for immediate efficiencies, although in the  
18 long run if we're more effective I think we're going  
19 to be more efficient in what we do also.

20 I'll skip the fourth one for a second, and  
21 then the last part was to evaluate the effectiveness  
22 of our dissemination of operating experience  
23 information.

24 In the middle of this recommendation was  
25 to also look at the generic issue program, and we did

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1 that as a separate section of the report. It was part  
2 of the task force effort, but we view that as really  
3 separate from the -- it's related and tied into the  
4 operating experience program, but it's a separate  
5 program.

6 The other recommendation that we were  
7 addressing was to look at the adequacy -- scope and  
8 adequacy of requirements on licensees for handling  
9 operating experience.

10 The task force members are on this slide.  
11 We had a very good representation of the organizations  
12 that both are involved in operating experience  
13 activities, the ones that do the screening, the  
14 evaluation. I think a couple of weeks ago you had a  
15 presentation from Pat Baranowski on the ASK program  
16 and his work. We have a representative from his  
17 branch.

18 We also had representatives from some of  
19 the users of operating experience, both the technical  
20 staff in NRR, technical staff in Research, and the  
21 inspection program. And one of the members -- Dave  
22 Beaulieu -- was a -- when he joined us had only been  
23 in headquarters a few weeks, and he had come -- he was  
24 a senior resident at Calvert Cliffs, I believe, so we  
25 had the regional perspective on the task force.

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1                   MEMBER LEITCH: Charles -- excuse me. Go  
2 ahead, George.

3                   MEMBER APOSTOLAKIS: Somebody decided that  
4 NMSS doesn't need this.

5                   MR. ADER: No. They have their own --  
6 early on before the charter was developed, in the  
7 action plan there was a decision that NMSS would be  
8 looking at their area separately. And we have  
9 interfaced with them. On occasion they've asked for  
10 our reports, and we've briefed them.

11                   MEMBER LEITCH: These two Davis-Besse  
12 lessons learned recommendations that you looked at,  
13 one of which had five parts, were those -- was that a  
14 given to this committee? Or did you conclude, after  
15 reviewing all of the Davis-Besse recommendations, that  
16 this was -- these were the two that --

17                   MR. ADER: No.

18                   MEMBER LEITCH: -- fit in your area of  
19 responsibility?

20                   MR. ADER: Yes. It was a given in the --

21                   MEMBER LEITCH: So that was a -- from the  
22 get-go, that was your responsibility.

23                   MR. ADER: Yes. And the action plan,  
24 those two recommendations -- there's other related  
25 recommendations.

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1 MEMBER LEITCH: Yes, that's what I was  
2 thinking.

3 MR. ADER: -- put down in the  
4 implementation. I think the view was that some of  
5 those recommendations would fall under the task force  
6 effort.

7 MEMBER LEITCH: Okay.

8 MR. ADER: But these were two that were  
9 specifically identified and assigned and included in  
10 the charter of the task force.

11 MEMBER LEITCH: Okay. Thank you.

12 MR. ADER: And then we had -- we have a  
13 steering committee that's made up of Bill Borchardt  
14 from NRR, Jack Strosnider, and James Caldwell from  
15 Region III.

16 MEMBER APOSTOLAKIS: What's the  
17 difference? What's the difference between the task  
18 force and the -- what does the steering committee do?

19 MR. ADER: They do --

20 MEMBER APOSTOLAKIS: They just report to  
21 them and --

22 MR. ADER: They advise and provide  
23 guidance.

24 MEMBER APOSTOLAKIS: This is your ACRS.

25 MR. ADER: And they --

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1 MEMBER SIEBER: This is your boss, right?

2 MR. ADER: They're more our bosses, I  
3 guess.

4 MEMBER SIEBER: They're the boss.

5 MR. ADER: Advisors.

6 MEMBER SHACK: They have to listen to  
7 these advisers.

8 (Laughter.)

9 MEMBER APOSTOLAKIS: Oh, okay. That's the  
10 difference. All right.

11 (Laughter.)

12 MR. ADER: I listen to this -- and they  
13 are supposed to work the recommendations through the  
14 management.

15 MEMBER APOSTOLAKIS: Oh. So they have  
16 responsibilities, too.

17 MR. ADER: The report will eventually go  
18 back to them as part of the implementing  
19 organizations, and particularly NRR and Research. And  
20 at the end I'll get in a little bit of where we are in  
21 the schedule. We're nearing completion, but there's  
22 a few more activities to happen the rest of this year.

23 The task force approached our review of  
24 operating experience pretty broadly. We -- instead of  
25 just looking at here's the organizational reviews of

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1 operating experience, we really looked at the  
2 organizations that we believe either use it or should  
3 be using it.

4           There's an interrelation, because not only  
5 would operating experience feed their activities and  
6 help inform them, but they are also a valuable part of  
7 the process to feed operating experience back into the  
8 people that would do screening and review. And there  
9 I'm talking inspection program and even some of the  
10 technical staff.

11           We broke up the approach to define  
12 objectives for an operating experience program, and  
13 what we considered attributes of a good program. And  
14 that's where I was in May when I briefed you; we had  
15 developed those. The attributes are then -- they're  
16 what guided the rest of our assessment of the  
17 operating experience program.

18           And we tried to look at the functions that  
19 are currently being performed to see if there were  
20 gaps and overlaps, where we could recommend  
21 improvements.

22           The program objectives are very similar to  
23 what I presented in the May timeframe. We've been  
24 trying to stay consistent with the agency's strategic  
25 plan as it's being revised. I think in the ones you

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1 saw in May we had enhanced safety. The current  
2 guidance we have from the Commission is that the first  
3 objective is to ensure safety, so we've tried to  
4 adjust our objectives to reflect that.

5 MEMBER LEITCH: I assume operating  
6 experience means that information that comes to you  
7 via a number of sources -- licensee event reports, and  
8 so forth. But what is the sum total? Like let's say  
9 there are plant incidents that don't result in  
10 licensee event reports. Is that information  
11 considered operating experience?

12 MR. ADER: That would also be considered  
13 operating experience. There's generally morning calls  
14 between the regions and headquarters with the project  
15 managers, project directorate. And at those meetings  
16 currently someone from the operating experience  
17 section in NRR will sit in, and operating experience  
18 will be communicated through that process.

19 MEMBER LEITCH: Now, are they written up  
20 in some kind of a format to -- in other words, how  
21 does the rest of the community get to know about that?

22 MR. ADER: That's one of the areas we saw  
23 some enhancements could be made, because right now  
24 they are more of a phone call, conference call,  
25 verbal, the notes that come back from those meetings.

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1 Then, they may be pursued if there's an issue.

2 MEMBER SIEBER: Just to make it clear,  
3 though, that kind of operating experience is internal  
4 to the staff and really comes from the morning call  
5 that the resident inspector makes to the region where  
6 NRR sits in on that call, in the regional discussion  
7 of that.

8 On the other hand, the licensees are not  
9 part of that, except to the extent that the event or  
10 condition might have occurred at their plant. The  
11 licensees rely on bulletins, generic letters,  
12 information notices, INPO, SOERs, and other INPO  
13 documents and --

14 MEMBER LEITCH: Yes. But that's kind  
15 of --

16 MEMBER SIEBER: And so that's a different  
17 kind of a thing, and that's what NUREG 0737 describes  
18 as the messages in that interface. And it also  
19 specifically says that that has to go to the operator,  
20 so that will be in your requal program for operators,  
21 all of these -- the summation of these licensing  
22 things.

23 And then it says, beyond that, it goes to  
24 whomever else may be concerned, which usually is your  
25 engineering department, your licensing department, or

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1 it may be maintenance, or what have you. And so what  
2 goes on within the agency is different than what goes  
3 on between the agency and its licensees.

4 MEMBER LEITCH: I guess what you're  
5 describing is what I would say primarily is the output  
6 from the operating experience program. My question is  
7 more about, how do you get --

8 MEMBER SIEBER: How do you get it in?

9 MEMBER LEITCH: -- the input. There would  
10 be no licensee events, you know by morning calls  
11 that --

12 MEMBER SIEBER: Yes.

13 MEMBER LEITCH: Like I'm thinking about  
14 something like the Quad Cities cracking -- probably  
15 not an LER, not an event notification. It's -- how  
16 does the rest of the -- well, I know Jack's response,  
17 like that might resolve in a bulletin or something  
18 that goes out to the --

19 MEMBER SIEBER: Information notice.

20 CHAIRMAN BONACA: But see, there are  
21 recommendations that address that, right?

22 MR. ADER: On the back of the report it  
23 lists a lot of different sources. An example of some  
24 operating experience that came in while the task force  
25 was reviewing this -- and it kind of highlighted one

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1 of the areas we saw that could be improved -- there  
2 were some degraded buried cables at one of the plants.

3 They came in through an e-mail from the  
4 region to headquarters, the technical side of the  
5 house, because one of the members of the task force  
6 had gotten the information. You know, it was  
7 communicated back in through the operating -- into the  
8 operating experience program. But there's a number of  
9 mechanisms for getting information, and some of them  
10 tend to be ad hoc.

11 And one of our recommendations -- getting  
12 a little ahead of myself -- was to try to establish  
13 this clearinghouse concept that would be people would  
14 know where you could communicate things into, and it  
15 would be a more formalized process. So you know that  
16 that's a good place to send it, and they would get  
17 information out to the appropriate technical staff,  
18 and also look at it for potential followup as part of  
19 a screening process.

20 MEMBER ROSEN: But you have, do you not,  
21 access to the INPO products?

22 MR. ADER: Yes. We get the INPO CN  
23 documents.

24 MEMBER ROSEN: Well, that would include  
25 significant event notifications, significant event

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1 reports.

2 MR. ADER: Yes.

3 MEMBER ROSEN: Both of which are  
4 electronic, and significant operating experience  
5 reports, which are typically hard copy, but they  
6 include recommendations that INPO makes to its members  
7 that they follow up during their annual evaluations.  
8 So those are very important.

9 So those three sources of information,  
10 plus you have the EPIX system, which is access --  
11 which is I believe the successor to NPRDS.

12 MR. ADER: Right.

13 MEMBER ROSEN: And essentially you have  
14 access to almost all of the operating experience that  
15 INPO members have, and I am interested in how you are  
16 going to pull that in, too.

17 MR. ADER: Well, as you've mentioned, the  
18 INPO CN documents routinely get provided to the  
19 screening organization -- in NRR, the operating  
20 experience section. I should have introduced at the  
21 table -- side table is Ian Jung, Don Marksberry, and  
22 George Lanik, which kind of represent three of the  
23 organizations. Ian, up until just very recently, was  
24 with the operating experience section in NRR. He was  
25 -- got a promotion, and he's over in NISR now. But

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1 I'd like to contribute that to the -- part of the task  
2 force effort.

3 Ian, I don't know if you want to add any,  
4 because you're more involved in the day-to-day INPO  
5 reviews.

6 MR. JUNG: Ian Jung again. I think  
7 Charlie described it right in terms of INPO documents.  
8 We get those documents. We systematically review in  
9 NRR. We try to see whether we should also issue  
10 generic communications based on that, and we try to  
11 communicate to stakeholders internally, technical  
12 staff, what they have to know.

13 MEMBER ROSEN: Well, I think that's very  
14 good. You see that the big problem in operating  
15 experience -- or two big problems is you don't get any  
16 information, and the other problem is you get too  
17 much. And dealing with the too much information can  
18 be just as difficult as dealing with not getting any.

19 So what INPO does is deals with the too  
20 much by having a screening function that ultimately  
21 ends up putting out the important things in these  
22 documents. And so I think it's very useful to take  
23 advantage of that.

24 MEMBER SIEBER: The staff also does  
25 screening.

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1 MR. ADER: The staff does screening. The  
2 staff has periodic communications with INPO on issues  
3 that they may be looking at -- that they may be  
4 looking at to try to maintain some awareness of  
5 potential issues out there.

6 You're right. They do the screening for  
7 industry. There is a section in NRR that does the  
8 daily event screening based on a wide range of  
9 information, and --

10 MEMBER ROSEN: Of your own internal  
11 events, though. They seem to me --

12 MR. ADER: From the LERs, from the --

13 MEMBER ROSEN: The screening you are doing  
14 is screening your information that comes from LERs and  
15 other sources that come directly --

16 MR. ADER: Yes.

17 MEMBER ROSEN: -- into the agency.

18 MR. ADER: Yes.

19 MEMBER ROSEN: And on top of that, you  
20 have a pre-screened selection that comes from INPO.  
21 You have both sources.

22 CHAIRMAN BONACA: But it seems to me that  
23 when we described it, the issue was more -- not so  
24 much that you'd get or don't get -- you get  
25 information -- but what you do with it. That was my

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1 perception when we talked about this. The main  
2 concern was not that the information wasn't coming in,  
3 but --

4 MR. ADER: There's a lot of information --

5 CHAIRMAN BONACA: -- how it is being  
6 digested, and what you do with it.

7 MR. ADER: Yes. There's a lot of  
8 information there, and the key is trying to screen  
9 what's important, get it to the appropriate staff,  
10 either for information or for follow up.

11 MEMBER APOSTOLAKIS: I think from all this  
12 viewgraph number 8, the word where we really need help  
13 is communicated. That's my impression. Over the  
14 years, you know, we've interacted with the AEOD and  
15 other organizations. That seemed to be the weak link.  
16 I think the analysis and screening is pretty good.

17 MEMBER SIEBER: Well, there is --

18 CHAIRMAN BONACA: Well, I mean, you have  
19 a lot of conclusions and recommendations.

20 MR. ADER: Yes. I'm going to touch on a  
21 lot of this and --

22 MEMBER ROSEN: Yes, maybe you should just  
23 move along.

24 MR. ADER: -- the discussion of --

25 MEMBER ROSEN: We'll see how much of these

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1 thoughts are covered.

2 CHAIRMAN BONACA: Yes.

3 MR. ADER: The attributes -- again, these  
4 are the same that you saw in May. We're trying to say  
5 here's the attributes of a good operating experience  
6 program. It includes both pieces of program -- what  
7 I call programmatic attributes like defining roles and  
8 responsibilities, doing programmatic effectiveness,  
9 basic communications, but also the functions that you  
10 would do as far as screening of -- well, let me back  
11 up -- the data collection, the screening, the  
12 evaluation analysis, decisions on the need for follow  
13 up, and then actual follow up. So these are the same  
14 as presented in May.

15 I'm trying to put it in a graphic, and I  
16 always -- you always run a risk, because there's  
17 always a lot of different arrows you can put to try to  
18 show all of the interrelationships.

19 MEMBER APOSTOLAKIS: Also, you should show  
20 where you entered the loop.

21 (Laughter.)

22 This is an infinite loop.

23 (Laughter.)

24 MR. ADER: It's a continual loop.

25 MEMBER APOSTOLAKIS: It's continually

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1 improved.

2 MR. ADER: One of the comments we got  
3 early on is the top box is really not an action, it's  
4 a --

5 MEMBER APOSTOLAKIS: It's the end result.

6 MR. ADER: -- place, so we rounded the  
7 corners to try to make a distinction.

8 MEMBER SIEBER: That's where you start,  
9 though.

10 MEMBER APOSTOLAKIS: Actually, that arrow  
11 should not start -- the upper right-hand side. This  
12 is the input, really, from stakeholders.

13 MEMBER ROSEN: See, Charlie, you shouldn't  
14 have told us.

15 MR. ADER: I did this with great  
16 hesitancy.

17 MEMBER POWERS: Professor Apostolakis,  
18 aren't you going to comment that there are all kinds  
19 of bright lines here, and they should be fuzzy?

20 MEMBER APOSTOLAKIS: That's absolutely  
21 true, too. I mean, what is going on here?

22 MEMBER SIEBER: There's too many boxes.

23 MEMBER APOSTOLAKIS: But he asked the  
24 right question. What does it mean? What does it  
25 mean? This is what --

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1                   VICE CHAIRMAN WALLIS: George, one thing  
2 that happens is every time you go around the loop the  
3 entropy increases.

4                   MEMBER APOSTOLAKIS: The entropy, yes.

5                   MR. ADER: We take -- I think because of  
6 the way the task force was set up, and it was  
7 addressing the lessons learned from Davis-Besse, we  
8 kind of entered the process looking for where we could  
9 contribute to make improvements. So we didn't go back  
10 and spend a lot of time documenting, well, here is  
11 this program, and this piece works okay, and this one  
12 doesn't.

13                   We tried to look at the overall process of  
14 the interaction between the groups assigned to review  
15 operating experience or to analyze or review it, and  
16 the end users.

17                   Our overall conclusions -- we found the  
18 agency has the pieces. There is the various groups  
19 that do the screening, that do the analysis, we do  
20 some evaluation. Do we do enough evaluation? That's  
21 a different question, but we do evaluation.

22                   We saw a number of areas where we felt  
23 that the program could be enhanced, improvements in  
24 the communication and coordination, as Dr. Apostolakis  
25 mentioned on communications. And the other key piece

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1 is really trying to make sure that the lessons learned  
2 and the insights from operating experience are fed  
3 back into the process, that there's expectations for  
4 people to take the information and utilize it to  
5 inform the inspection program, to inform the  
6 regulatory program, to evaluate it -- do we need to do  
7 something different in our review guidance or our  
8 other actions.

9 We were finding there's a lot of event  
10 follow up. You know, we screen events. Some of the  
11 longer-term analysis and screening and follow up from  
12 that is an area that there was some done but probably  
13 not as much as the task force thought -- thinks there  
14 should be.

15 That's kind of the overall conclusions of  
16 where we came out, and what I'll do is try to walk  
17 through the attributes and specific recommendations.

18 MEMBER SIEBER: Let me ask a question at  
19 this point. The agency has a lot of in boxes where  
20 this information comes in, and then it's screened,  
21 given to the cognizant section or function within the  
22 agency. There is, in my mind, at least an abstract  
23 potential when you do that to sort of separate this  
24 information into these various technical boxes,  
25 whereas a conclusion may be a function of more than

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1 one of these analyses.

2 How do you put -- do you recognize that  
3 maybe that could be the case? And if so, how do you  
4 put it back together so that you come out with  
5 something that's comprehensive enough to cover various  
6 aspects of a single condition? It's almost like a  
7 cross-cutting issue kind of thing.

8 MR. ADER: What we were finding actually  
9 is that information comes in. It gets screened for  
10 potential follow up. Do we need to issue an  
11 information notice? Do we need to issue a generic  
12 letter or a bulletin?

13 And now I'm talking about the short-term  
14 evaluations, when the stuff comes in the door. It was  
15 not being screened and disseminated routinely to the  
16 technical staff. It was -- I think a few years ago  
17 when they were looking for efficiencies they decided  
18 that the screening process could identify those things  
19 that needed to be followed up.

20 Our discussions with -- we had a number of  
21 interviews with the technical staff, the branch  
22 chiefs, what their needs were, what their region's --  
23 what they were looking for. What we were finding is  
24 routinely information was not sent to the technical  
25 branches for information. Generally, they got it if

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1 the decision was made we need to evaluate this more,  
2 so they were given an assignment to evaluate it, a  
3 charge number to look at it.

4 The other information -- some they might  
5 get to, because it might be considered of interest,  
6 but it was not routinely sent to the technical staff.  
7 And there was no -- because of that, they had no  
8 expectation, and not -- they did not have an  
9 opportunity to look at something and say, "Well, it  
10 was screened as not significant, but based on our  
11 experience in this area we're seeing something  
12 different here, that maybe we'd like to revisit this."

13 And one of the recommendations we have is  
14 that that process needs to be clarified. And you  
15 don't want to send the electrical experts everything  
16 that comes in the door. You want to try to send them  
17 the type -- the information that would be of interest  
18 to them.

19 Part of a recommendation is that that  
20 dialogue and process needs to take place to try to  
21 better understand the user needs. You know, what do  
22 the electrical engineers need? What does somebody  
23 that's following pumps and valves need? And try to  
24 get them information that -- maybe just for  
25 information to keep them aware of what's going on out

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1 there.

2 MEMBER LEITCH: One thing that industry is  
3 always striving for in their corrective action program  
4 is a good trending program. Do you have a trending  
5 program? For example, there might be a piece of  
6 information that comes in.

7 Okay. That's of no particular  
8 significance, but next week another plant has a  
9 similar problem, and the week after that another plant  
10 has a similar problem. Does it somehow -- are you  
11 able to integrate that and say, "Well, one is not a  
12 problem, but we're seeing this at several different  
13 places. Therefore, we'd better get out some kind of  
14 communication on this topic."

15 MR. ADER: Right now that tends to be done  
16 -- the trending at that level is more through the  
17 people that are doing the screening, that they've seen  
18 several of these coming in. Without getting it to the  
19 technical staff, the task force felt you were losing  
20 an opportunity for an expert in an area to say, "I'm  
21 starting to see a number of these things."

22 The formal trending programs tend to be at  
23 the industry-wide -- the industry trends program,  
24 where you're trending, you know, key indicators of  
25 industry performance.

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1                   MEMBER LEITCH: Yes, but that's a much  
2 higher level thing than I'm speaking about for the --  
3 I guess what I hear you saying is there is not really  
4 a formal trending program. It kind of depends on  
5 individuals recalling these issues.

6                   MR. ADER: There is -- I wouldn't call it  
7 trending. There's the reliability studies done in the  
8 branch -- Don Marksberry is attached with it -- that  
9 I think also you were briefed a couple of weeks ago --  
10 that deals with, you know, certain components and  
11 systems.

12                   But there's not -- well, there's  
13 evaluations that will be done on occasion that will go  
14 back and look -- you know, they'll take a topic area.  
15 The grid reliability study was one that had come out  
16 of the Regulatory Effectiveness Branch and Research  
17 that will go back, and they'll look at a specific area  
18 and look at issues from that point of view, but not a  
19 routine trending of a lot of different pieces.

20                   John or George, I don't know if you want  
21 to add more from your program perspectives or --

22                   VICE CHAIRMAN WALLIS: Charlie, you're  
23 still creating a library of experience, which is then  
24 available to people it seems to me. And the knowledge  
25 base of the agency is not just the experience, but

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1 operating experience -- what people have done with it.  
2 If people have used it for something, or if they've  
3 analyzed it and reached conclusions, does that also  
4 somehow fall into this knowledge base that you are  
5 dealing with here?

6 MR. ADER: The recommendations for the  
7 data collection and availability -- there's a lot of  
8 that that's available in various databases. Some of  
9 it is trying to link it, but part of that information  
10 is also operating experience, is reports that have  
11 come out of the evaluations. You know, information  
12 notices are obviously part of the library of  
13 information, bulletins, generic letters.

14 So anything that would have been through  
15 the more formal process of --

16 VICE CHAIRMAN WALLIS: And it's all clear  
17 that -- it's clearly linked, so that somebody who is  
18 trying to follow the path of all this stuff and get  
19 together the information can do it? That seems to me  
20 not to easy to --

21 MR. ADER: The recommendations are trying  
22 to bring it together in a better form, so it is easier  
23 to link. Right now information notices -- one of the  
24 comments we got from the regions, if they want to go  
25 back and understand what generic communications has

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1 been put out over a period of time, you can go to the  
2 web page, which has it by year, and you can go  
3 through. Or you're going into search routines, and  
4 improving some of the search routines, is an area that  
5 could enhance that.

6 MR. ADER: Let me move through. I guess  
7 we just have an hour brief, so I don't want to -- and  
8 so far I've pretty much presented stuff that I was the  
9 older -- the older information.

10 The first attribute that we had was the --  
11 this overarching attribute of defining roles and  
12 responsibilities. When the functions from AEOD were  
13 reassigned to other offices, the management directive  
14 that governs the review of operating experience --  
15 it's Management Directive 85 -- was not updated, nor  
16 was it assigned to anybody to update.

17 I think actually the Office of  
18 Administration has NISR as the lead, but they're not  
19 really involved in this part of the program. So that  
20 management directive has not been updated, and it  
21 doesn't provide clear -- so there is no document that  
22 provides the clear roles and responsibilities today of  
23 how these various groups would interface together,  
24 what their responsibility is when you get information  
25 to do something with it.

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1           Within the incoming information, the  
2 screening, NRR has an office letter that does address  
3 that part of it. But the overarching agency vision,  
4 and what we were calling is this lack of a clear  
5 vision of how the pieces would fit together, and also  
6 how they would interact and interface with the users,  
7 the licensing offices, the inspectors, has been  
8 missing of late.

9           So, you know, the key recommendation is  
10 try to define that. We think there ought to be a  
11 single individual, single point of contact that has  
12 responsibility for coordinating, ensuring the  
13 activities are coordinated. We would look to that  
14 individual doing -- having the lead on a periodic  
15 assessment.

16           We're recommending a senior manager. We  
17 didn't specific a level. I think that's a line  
18 management organization to decide, but you need  
19 somebody you can go to and say, "How are the pieces  
20 functioning? Or if they're not functioning, do you  
21 have actions to get them to work?"

22           And also, the responsibility and the  
23 expectations for the users when you get reports.  
24 Reports come out on evaluation of operating  
25 experience, and some of the comments we were getting

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1 is they'll show up on some -- what am I supposed to do  
2 with this? That process needs to be defined. Who is  
3 responsible for taking that report, looking at it,  
4 seeing what additional action should be taken based on  
5 the recommendations?

6 The one area we have a lot of information  
7 and a lot of databases is the data collection. There  
8 was -- the recommendation that we saw is -- there's a  
9 lot of individual databases that have kind of grown  
10 for special purposes. There's nothing wrong with  
11 that. The task force didn't say create one monster  
12 database that does everything. I think people  
13 recognize that that sometimes is not effective.

14 But we're recommending that a central  
15 organization catalog these databases, decide which  
16 ones are appropriate to be linked on maybe a website  
17 is the way -- the best way to get information out now,  
18 work with the people that are involved in ADAMS to try  
19 to get consistency in the way documents are put in,  
20 try to improve search routines, and there's a number  
21 of initiatives that are ongoing to do this.

22 Some of them you heard a few weeks ago as  
23 far as the integrated data collection coding system.  
24 There's an initiative that's fairly new for an  
25 inspector electronics support system that will try to

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1 have modules of information that would be useful to  
2 the inspectors.

3 MEMBER SIEBER: Will this go on your  
4 external website, too?

5 MR. ADER: Some of it -- the intention  
6 would be that it would be external. Some of it is  
7 currently external. Some would be external. There is  
8 some information -- some of the international and some  
9 of the INPO stuff -- that would be limited, the  
10 internal dispute restrictions, that we could --

11 MEMBER SIEBER: But that would be the  
12 limitation -- proprietary or classified information.

13 MEMBER ROSEN: Well, some of the  
14 information they get from INPO is acquired under a  
15 memorandum of understanding. With INPO, or between  
16 INPO and the agency, about confidentiality and  
17 proprietary --

18 MR. ADER: Yes, and information with that  
19 type of restrictions would -- you know, would not go  
20 on.

21 MEMBER SIEBER: But otherwise all of the  
22 other information that would be useful to licensees,  
23 ACRS members, manufacturers, and so forth,  
24 whistleblowers, would be there, right?

25 MR. ADER: I would see no reason that it

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1 wouldn't be. We did not get into the design of the  
2 system and make the specific recommendations of what  
3 information should and shouldn't be, but what we saw  
4 was a lot of information and access to it was not  
5 necessarily easy.

6 MEMBER SIEBER: Well, I sort of look at  
7 the whole program as a data collection and screening  
8 analysis and dissemination process. And it would seem  
9 to me that your external stakeholders play a  
10 significant role, because those are the ones who  
11 basically take the action. And I would encourage  
12 their full consideration.

13 MR. ADER: And my understanding of the  
14 people that -- with the ongoing initiatives are  
15 looking to see how much of that that can be available.

16 MEMBER SIEBER: Right.

17 MR. ADER: And now there has been requests  
18 from outside, so I would see no reason that wouldn't  
19 continue, but --

20 MEMBER SIEBER: Okay. Thank you.

21 MR. ADER: The effective screening  
22 operating experience -- and this is where we -- in the  
23 report we got into the discussion of this  
24 clearinghouse function, having one organization --  
25 maybe it would be an expanded operating experience

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1 section in NRR, but that an organization would be  
2 designated to have the lead and the agency would  
3 recognize it as the focal point for taking this  
4 coordination role, receiving the information,  
5 operating experience information, disseminating it.

6 They would work with the users to  
7 understand the user needs, what type of information  
8 would be useful. They would -- when there's decisions  
9 to evaluate and follow up on a particular event or a  
10 particular operating experience report, they would be  
11 the organizations that kind of project manage that and  
12 coordinate the tracking and the decision process to  
13 make sure that things are followed through on.

14 They would try to filter the information  
15 and get it back to the technical staff, so it's  
16 available to them. It provides another opportunity  
17 for a different set of eyes to identify things, and  
18 they would work with the inspection program to clarify  
19 the process of working with the licensees or the  
20 inspectors to get additional information that's  
21 required to do an evaluation of the significance of an  
22 event.

23 Sometimes the information comes in and  
24 there's questions, is this generically applicable?  
25 There's one utility problem. Is it safety

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1 significant? You may get a Part 21, and you don't  
2 know where it's located in the plant. And you get  
3 into kind of a catch 22. If it's located in non-  
4 safety areas, that's not significant, and we don't  
5 need to follow up. But we're not quite sure where it  
6 is, and people want to know -- we only want to follow  
7 up on significant things.

8 So the clearinghouse organization would  
9 work with --

10 MEMBER SIEBER: Well, that has its  
11 dangers, too, because you may -- for example, in cable  
12 and wire, you may use the same wire in safety and non-  
13 safety applications. And if you get a failure in a  
14 non-safety application, it may tell you something  
15 about the reliability of that component when it was  
16 applied in a safety system.

17 And so I think that kind of information  
18 would be important to a licensee. Maybe it isn't  
19 important to the regulator, because they don't  
20 regulate that aspect. But some thought ought to be  
21 given as to how that kind of a situation is treated.

22 For example, solenoid valves. No matter  
23 whether it's safety or non-safety, you buy from the  
24 same company. And say you've got warehouses full of  
25 them, and you're installing them in the plant. And if

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1 you get a lot of failures, if they're non-safety  
2 failures the regulator isn't particularly interested,  
3 but the same valve is used in the safety application.  
4 So you may want to think about that.

5 MR. ADER: I think that some of the  
6 information -- some of the Parts 21's will be sent  
7 out. It's just whether the agency wants to take some  
8 additional follow up to know where it's at. Some of  
9 these would have been notified.

10 MEMBER ROSEN: What are these IRS reports?  
11 They're not the IRS that I know.

12 MR. ADER: It's the International Incident  
13 Report -- I think it's Incident Reporting System.

14 MEMBER ROSEN: Oh, the Incident Reporting  
15 System. So it's the international system.

16 MEMBER SIEBER: They're pretty high level  
17 reports there.

18 MR. ADER: And with the current screening  
19 right now, not all LERs are screened. It has tended  
20 to be workload-driven. They try to look at the  
21 significant ones, but the number has come down  
22 significantly from a few years ago and --

23 MEMBER ROSEN: It seems like you should be  
24 screening all LERs these days.

25 MR. ADER: And that's where the --

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1 MEMBER ROSEN: There's so few of them.

2 MR. ADER: That's where the task force  
3 came out of this. There's so few of those that it  
4 makes sense not to screen them.

5 Now, the inspectors will look at them, the  
6 project managers will get the information, but, again,  
7 this is where we saw some of the expectations were not  
8 clear on -- you know, if an inspector and a project  
9 manager gets this, what's their role to raise it back  
10 into a central group? So our recommendation was with  
11 so few of them, the central group should do the  
12 screening of all of them.

13 The communication is kind of -- is clearly  
14 a cross-cutting issue. The clearinghouse function --  
15 and I've mentioned this several times, so it's kind of  
16 a key recommendation is to have a group that's got  
17 that responsibility and it's been tagged by senior  
18 management for looking at the processes of  
19 communication, trying to establish -- we didn't want  
20 to in the report say, "Here is the procedure you  
21 should have." I think that's something that needs to  
22 be developed between the clearinghouse and the user  
23 organizations.

24 But the function needs to be done. The  
25 activity needs to be done. And it cuts across a lot

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1 of the different areas, both in the event screening,  
2 the initial information coming in the door, but also  
3 when you have longer term evaluations that are coming  
4 out of the -- out of Research. What's the process for  
5 communicating those to the right people?

6 When we talked to the regions, talking to  
7 the inspectors, they were really looking for  
8 information that is filtered and synthesized to them.  
9 They get reports and said, "We -- you know, we know  
10 there is some good information in here." And if they  
11 have time, they'll try to have somebody look at it.

12 But they're really looking for somebody to  
13 take that information. If it's the inspectors, then  
14 it would be converted into something that would be  
15 focused for them. If they're doing all sorts of  
16 inspection, you might consider them using their  
17 knowledge base and their management's knowledge base,  
18 having this additional information to say what sort of  
19 problems are other regions experiencing, or other  
20 plants, or trying to -- that's part of the  
21 communications process of getting that information  
22 out.

23 MEMBER APOSTOLAKIS: Isn't number 3 really  
24 unnecessary? If everything else is meaningful, this  
25 is -- that's why you have attribute number 4.

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1 MR. ADER: There was a concern on -- with  
2 the turnover in staff that the lessons learned from  
3 events of the past were not being passed on to the  
4 next generation. The big ones people go to the  
5 training courses, and you hear about TMI. So if  
6 there's other events, it's part of the knowledge  
7 transfer. How do we capture this wealth of  
8 experience?

9 MEMBER APOSTOLAKIS: Ah, okay.

10 MR. ADER: The operating experience.

11 MEMBER APOSTOLAKIS: I guess you would --  
12 you should replace the word "better used" to make it  
13 more specific to what you just said, because then it's  
14 a recommendation. But just to say "use them better,"  
15 I mean, it doesn't mean anything.

16 MR. ADER: Yes.

17 MEMBER APOSTOLAKIS: So the word "better  
18 used" really is -- the second line of the --

19 MR. ADER: I tried to paraphrase the  
20 recommendations for the benefit of the slide.

21 MEMBER APOSTOLAKIS: Oh, okay.

22 MR. ADER: I wasn't wording -- you know,  
23 the first cut each recommendation has a little bit  
24 more to it, and there's more in the discussions.

25 MEMBER APOSTOLAKIS: Okay.

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1 MR. ADER: And we talked about working  
2 with the technical training centers -- the technical  
3 training center and the other organizations to try to  
4 find a way to bring that information into our  
5 knowledge base.

6 MEMBER APOSTOLAKIS: Okay.

7 MEMBER FORD: Do you mind going back to  
8 14, please? Item number 2 seems to me to be critical  
9 in your whole thought process. What are the barriers  
10 that currently exist that enable the technical staff  
11 to identify the potential safety issues? And how will  
12 you remove those barriers?

13 MR. ADER: Which?

14 MEMBER FORD: Item number 2.

15 MR. ADER: Oh, okay.

16 MEMBER FORD: What are the current  
17 barriers? And how are you going to remove them?

18 MR. ADER: You need the expectation and  
19 the resources, the time from management to say part of  
20 your job is when you get the information, you know,  
21 it's being provided to you for information. But if  
22 you see some events, if you see some areas of interest  
23 --

24 MEMBER FORD: Well, take for instance  
25 Davis-Besse. How would the technical staff, someone

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1 in Research for instance, how would they have foreseen  
2 that boric acid corrosion of alloy steel, which is a  
3 known phenomena, would have led to the extent of  
4 corrosion that you did see eventually at Davis-Besse?

5 And that's one instance. You have a whole  
6 lot of these sort of informations coming in. How is  
7 that one particular member of a technical staff going  
8 to say, "Whoa, we've got a big problem coming down the  
9 line"?

10 MR. ADER: I don't know that they would,  
11 but right now the information doesn't routinely go to  
12 them to see it to begin with. If they were seeing  
13 events that, you know, they're working in material  
14 corrosion, and they start seeing a number of operating  
15 events of boric acid corrosion over time --

16 CHAIRMAN BONACA: It's a significant  
17 issue, because, I mean, powerplants -- I remember we  
18 used to get a clearinghouse that looked at information  
19 and sent it to specific departments asking for an  
20 assessment that had to be answered in writing, as to  
21 the applicability of the issue, how it is being dealt  
22 with, or whatever.

23 Now, you can do the job well or not well,  
24 but you have a traceable process by which you can  
25 evaluate if the process is working. For example, you

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1 find the times -- a list of the early times that the  
2 evaluations were not properly done. They were  
3 superficial evaluations. Like it was said, you know,  
4 this material -- this was a BWR, and we have a PWR, so  
5 it's not applicable.

6 Then, you go back and you say that's wrong  
7 because the same material may be on -- so you have a  
8 written flow of information on which you can base your  
9 assessment of the process of identifying potential  
10 safety issues. What you're telling me is that you do  
11 not have a feedback mechanism that you can trace.

12 MR. ADER: We were trying to find a  
13 balance. One of the concerns when we interviewed the  
14 technical staff is they didn't want everything. They  
15 didn't want to be -- there was different views of  
16 different individuals, but you need to decide who is  
17 the screener of the information. And we're saying the  
18 central clearinghouse ought to do the screening. You  
19 know, they have the first responsibility to say, "We  
20 think this is something new, significant, that should  
21 be followed up on. Maybe it needs some more detailed  
22 evaluation."

23 Those events would get tracked and  
24 dispositioned. So if they sent it to a technical  
25 staff member and said, "We think this is something

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1 that you should evaluate," then there would be that  
2 process to close it out. Well, no, it doesn't need  
3 any more action, or, yes, we need some more  
4 information or we should take -- have information.

5 But then there is other information that  
6 doesn't pass the screening but should be provided to  
7 them for their information. It gives them an  
8 opportunity to be aware of it. They may have a  
9 different perspective or a different sensitivity, and  
10 they may raise it, and you need the mechanism for them  
11 to bring it back into the process and say, "Well, wait  
12 a minute. You didn't" --

13 CHAIRMAN BONACA: Okay. I understand  
14 that. Let me ask another question. So you believe  
15 that there is right now a documented process to assess  
16 the effectiveness of the evaluation of potential  
17 safety issues based on operating experience provided?

18 MR. ADER: I'm sorry. Could you repeat  
19 that?

20 CHAIRMAN BONACA: I'm saying that you  
21 believe that there is a mechanism -- that there is a  
22 documented process that you can look at to determine  
23 whether or not potential safety issues are being  
24 identified.

25 MR. ADER: There is -- and, Ian, maybe

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1 you'll want to speak to it. The operating experience  
2 section has a tracking system where things that have  
3 been screened for followup action get tracked and  
4 closed out.

5 CHAIRMAN BONACA: Because, again, I mean,  
6 it seems to me the issue -- the issue is what you do  
7 with this information and if you're effective at using  
8 it, not necessarily -- you know, I'm sure that all of  
9 these recommendations -- including house and etcetera,  
10 are going to improve the collection, the screening,  
11 etcetera.

12 But then, if the organization doesn't do  
13 anything with it, then you haven't really resolved the  
14 problem? So I think, you know, a feedback look of the  
15 users is being done that one can then audit  
16 occasionally to verify that, in fact, it is effective;  
17 it will be appropriate.

18 MR. ADER: In subsequent attributes --  
19 there's one on evaluation, there's one on follow up  
20 where --

21 CHAIRMAN BONACA: Okay. I don't want to  
22 slow down the presentation. If you have an answer  
23 there, then we can talk about it then.

24 MR. ADER: There are some recommendations.

25 MEMBER ROSEN: Charles, let me give you

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1 the benefit of -- I was -- spent a lot of the earlier  
2 part of my life setting up a system at INPO which for  
3 this process, this clearinghouse -- I've been  
4 operating it for many years.

5 So what I found essential in that number  
6 one bullet on this slide was to make sure that you  
7 preserve the synergy of that process. In other words,  
8 don't take the documents when they come in and give  
9 them to five or six different people, let them go up  
10 to their offices and come back and tell you what's --  
11 or tell some central clearinghouse what's important.

12 That's not a very good way to do it. The  
13 best way to do it is to do that step and then get back  
14 together again and have the people who have done that  
15 look at the set of documents, tell the others in the  
16 group why they think it's important or not, because  
17 it's in that synergy, that collegial, if you have the  
18 right people in the room, that the -- you get a lot of  
19 power from looking at this thing. Don't let it get  
20 too fractionated is my advice.

21 MR. ADER: Ian, do you want to describe  
22 your current process for screening?

23 MR. JUNG: Yes. In NRR, there is an  
24 office instruction that described kind of general  
25 criteria to be used. I think the key issue is that

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1 whether the issue that came in, are we following that  
2 issue up? I think given -- in the current process we  
3 have a tracking system in NRR. A specific person is  
4 assigned to it, and he is responsible for tracking  
5 that issue, where it's going, and close that issue  
6 out. It's documented. It goes to the --

7 MEMBER ROSEN: You missed my point. But  
8 you also have your morning meeting where --

9 MR. JUNG: Right. Yes. We also have a  
10 morning meeting at 8:30 with the whole staff coming  
11 in, and the staff who is responsible for that issue  
12 actually communicates with the technical staff and  
13 gets some feedback on --

14 MEMBER ROSEN: But that's an instant --  
15 wash up or what happened today kind of thing, and  
16 that's okay, too, but still you're missing my point.  
17 My point is that it's in the reflection. It's in not  
18 the instant reaction but the considered reaction of  
19 individuals who then have that considered reaction  
20 examined by their colleagues and peers in a non-  
21 confrontational but interactive session as to why this  
22 piece of operating experience is or is not important.  
23 That the power of this system comes out.

24 MR. JUNG: I agree with that observation  
25 that currently the subsequent -- after the initial

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1 staff -- initial look, and the subsequent staff, which  
2 is a little bit of a mid-term or a long-term look, and  
3 are we comfortable with the situation. That is  
4 addressed in subsequent attributes.

5 MR. ADER: No, what I was trying to do --  
6 they have -- as you said, it's probably the instant --  
7 there is some discussion at those morning meetings as  
8 the events -- you know, does this one deserve follow  
9 up? You know, is it significant? So it's not one  
10 member going off independently.

11 The second steps of getting groups  
12 together is --

13 MR. JUNG: Yes. One thing I want to add  
14 is some -- the synergy is really there for most  
15 significant events like Davis-Besse or some of the  
16 bigger ones that came in. There's a management  
17 expectation for their staff to get involved and be on  
18 top of that.

19 So some of the more visible items that  
20 there's a special inspection or an AIT or something of  
21 that nature, the synergy comes from the direction of  
22 the management and --

23 MEMBER ROSEN: No, I'm not addressing  
24 that.

25 MR. JUNG: Right.

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1                   MEMBER ROSEN: I'm addressing the synergy  
2 that comes out because some one person says this I  
3 think is important, and it has to present that to the  
4 group of people around. And they -- he either gets  
5 recalibrated that it's not very important, because --  
6 or he gets reinforced, and then something gets done  
7 about it. And it's not the big events I'm worried  
8 about, because they always get attention. It's the  
9 things that are substantive that come out of a review.

10                   MR. JUNG: I agree.

11                   MEMBER ROSEN: That don't come out and hit  
12 you. You hit them. You get them before they get you.

13                   MR. ADER: Okay. I covered this. Another  
14 attribute of what we saw as a good program is this  
15 timely and thorough evaluations of the events, and  
16 these would be the ones -- both the short-term that  
17 had gone through a screening process, but also longer-  
18 term evaluations to look at, you know, a specific  
19 issue, maybe trends, a series of events, what does it  
20 mean.

21                   There is a fair amount of analysis going  
22 on. There's not a lot of evaluations right now. It's  
23 just a few resources being provided -- being devoted  
24 to that. That's an area that we saw that could  
25 benefit from some additional effort, both doing more

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1 evaluations but also then evaluating, what does this  
2 mean for the inspectors? Or what does it mean for a  
3 licensing program? And trying to do that bridge  
4 between just producing a report.

5 And then, the second part of that  
6 recommendation was that packaging for the end users,  
7 not just sending out a thick report and say, you know,  
8 we think this could be of use to you. But someone  
9 needs to extract the information with the right  
10 perspective. You know, if it's the Inspection Branch,  
11 you need somebody with an inspector perspective to  
12 pull out the information.

13 And there needs to be clear expectations,  
14 too, because you can do all of that and give them a  
15 good product. But if there's no expectations from  
16 management that it -- your job is to take this and  
17 revise the procedures or implement it, it could end  
18 right there. So that's part of that continual  
19 process, taking it to actual use of the information  
20 and verifying that it has been used.

21 In that process -- hopefully, Mario, this  
22 may address the issue you had as far as when you've  
23 gotten the decisions, this needs to be followed up.  
24 You need a process to, you know -- you need clear  
25 criteria. Your decision process for this needs to go

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1 forward, or this doesn't need to go forward.

2 And then you need to decide which actions  
3 need longer-term follow up and verification. Maybe  
4 it's a one-time event. You just notify industry.  
5 Maybe all you need through a generic letter is some  
6 information back and that'll close it out. But there  
7 may be some operating experience and some generic  
8 letters or bulletins that would require longer-term  
9 follow up.

10 There is a related action going on  
11 separate from this task force to go back and look at  
12 a lot of the generic communications to decide which  
13 ones may be programmatic or which ones should be  
14 revisited for long-term follow up.

15 It was a similar recommendation with --  
16 where we saw, and that would need to be documented.  
17 And the idea is to have a decision process, and it's  
18 clear why you're making those decisions.

19 And then the last attribute in the  
20 operating experience program was to -- you need to do  
21 a periodic assessment of any program to see, is it  
22 effective? Are the things you implemented, or your  
23 recommendations, that sounded like a good idea today  
24 really effective? Do you need to adjust it?

25 Some things may not work. Some things may

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1 work so well you want to do more of them. But you  
2 need to calibrate, and this is an area that when the  
3 functions of AEOD were consolidated in other offices  
4 there was a request to go back a year later and look  
5 at any additional deficiencies.

6 And there was a memo that went back to the  
7 Commission and said it looked like we have achieved  
8 our efficiencies, but there was not a really thorough  
9 review of the effectiveness of those changes. That's  
10 essentially what we're doing now.

11 The hope is if this is built into the  
12 program you don't have to create task force every  
13 three or four years to -- because of some event. You  
14 know, whether ACRS is part of that assessment process,  
15 whether you go outside the agency, they are all pieces  
16 that can help provide an assessment of effectiveness  
17 of the program.

18 MEMBER ROSEN: Charles, yesterday we heard  
19 a discussion of generic issue, and we asked the  
20 specific question -- when you close out this generic  
21 issue -- this is what was being proposed -- will you  
22 go back sometime later and assess the effectiveness of  
23 that generic issue close-out? In other words, did you  
24 really solve the problem with -- and the answer was  
25 no, there was no step on generic issues.

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1           And now what I hope you're saying is that  
2 this will include a step on -- that this number 2  
3 recommendation on this slide will include a generic  
4 issue effectiveness step.

5           MR. ADER: There is -- if you can wait two  
6 slides, I'll touch on generic issues.

7           MEMBER ROSEN: Okay. I sure can.

8           MR. ADER: But related, if I go back to  
9 the timely decisions on followup, the task force sees  
10 part of the process is you make a decision -- if it's  
11 a generic issue, and the resolution is through a  
12 bulletin, a rulemaking, you make the decision as part  
13 of that process. This is one that requires long-term  
14 follow up, and then you follow up on it.

15           You may make a decision for good reasons  
16 that this doesn't require long-term followup. But  
17 that decision process should be made.

18           The second Davis-Besse recommendation that  
19 we addressed was to assess the scope and adequacy of  
20 regulations governing licensees for use of operating  
21 experience. And when we looked at that, there's  
22 Appendix B, there's the maintenance rule, the LER  
23 rule. Post TMI 0737, there were confirmatory orders  
24 for probably half the plants to have an operating  
25 experience program. The rest have addressed it I

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1 think in their FSAR. We didn't do 100 percent, but we  
2 looked at it.

3 The view from the task force was it  
4 appears the regulations are adequate. The agency had  
5 stopped inspecting operating experience programs.  
6 They've recently revised one of their inspection  
7 procedures, which is problem identification and  
8 resolution, and wanted to emphasize that when they  
9 look at that, look at corrective actions, they will be  
10 now looking at the use of industry operating  
11 experience.

12 So at this point in time the task force  
13 concluded we didn't see -- what we saw seemed to be  
14 adequate, but having additional information over the  
15 years through this revised inspection procedure may  
16 provide some information the agency would want to come  
17 back and reassess. But without that information, it  
18 was tougher to say that the current programs are  
19 inadequate.

20 And then the last, next-to-the-last slide  
21 on -- was the generic issue program. We did look at  
22 the effectiveness of the generic issue program as one  
23 of the sub-recommendations of that first Davis-Besse  
24 lessons learned.

25 The program was revised. I think there

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1 was a pilot in '99. The management directive was  
2 reissued in 2000, I believe. Up until that time, the  
3 generic issue program took an issue up to what they  
4 called resolution, and resolution would be handing it  
5 off to another organization to implement. So it could  
6 be handed off to the people doing rulemaking. It  
7 could be handed off to a licensing organization. The  
8 issue was called resolved.

9 The management directive I think attempted  
10 to take care of the birth to grave of a generic issue  
11 that -- it's not resolved until it has been  
12 implemented, and there is discussion about  
13 verification of the implementation.

14 MEMBER ROSEN: Until the fat lady has put  
15 on her hat and gone home.

16 CHAIRMAN BONACA: No issue has gone  
17 through -- fully through that management directive to  
18 implementation verification. There have been issues  
19 that have gone through it to -- we don't need to take  
20 any action, but none have gone totally through the  
21 process.

22 What we did find in the discussions with  
23 some of the technical staff is either -- the lack of  
24 awareness of the process. New staff have come in, and  
25 they were not even aware there's this generic issues

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1 process there. So they're not aware that they could  
2 send an issue to it.

3 And anybody can raise an issue -- a member  
4 of the public, a member of staff. It doesn't have to  
5 go through the management concurrence chain. I think  
6 ACRS has raised issues in the past that have gone into  
7 the process, specters have, but this lack of awareness  
8 was a little surprising on my part, I guess because I  
9 have worked with the generic issues process on and  
10 off.

11 So communicating that out to people that  
12 here is an avenue to raise an issue is important. And  
13 after this additional experience with the process  
14 going -- taking some issues all the way through,  
15 again, as any process it ought to be assessed for its  
16 effectiveness. Is there a recommendation to --

17 MEMBER ROSEN: MD 6.4 now evaluates the  
18 overall -- has a step in it to evaluate the overall  
19 effectiveness of a generic issues program. That's  
20 what your slide -- your bullet number 3 says.

21 MR. ADER: No. We're recommending that  
22 that process be evaluated, and I think that's been on  
23 the plan of the generic issue program, is when they  
24 have enough experience --

25 MEMBER ROSEN: Okay. My specific point --

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1 and I'm trying to make it very clear -- is that  
2 program evaluations for effectiveness are fine. But  
3 what I really think we need to do is evaluate what is  
4 being done -- what has been done about each issue,  
5 each generic issue, sometime down the pike, some year  
6 or so after or two years, whatever.

7           Each issue -- issue by generic issue --  
8 should be evaluated -- with actions taken, should be  
9 evaluated for effectiveness, and a formal report  
10 written that says, yes, that what we did was effective  
11 with respect to that generic issue, that some problem  
12 has been resolved in PWRs, or has not. And we need to  
13 go back and do more or we don't.

14           In other words, it forces a discipline at  
15 the issue level, not at the program level, although  
16 that's -- you can do that, too, and should. But at  
17 the issue level, effectiveness review.

18           MR. ADER: And I agree that that decision  
19 needs to be made on -- in implementations which ones  
20 -- maybe all of them, but you need to make a decision  
21 which ones you're going to follow through on and  
22 follow through on them.

23           MEMBER ROSEN: And put it back on the  
24 table if you don't get the results you anticipated.

25           CHAIRMAN BONACA: When you go back a year

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1 from now and do this assessment, are you going to look  
2 at how the paper is flowing and the information is  
3 being provided better and -- or are you going to look  
4 at maybe taking an audit of more significant insights  
5 and see how they have been dealt with and disposition?

6 MR. ADER: What I would -- well, one,  
7 we're recommending that whoever the single point of  
8 contact is take the lead on that.

9 CHAIRMAN BONACA: I understand that.

10 MR. ADER: So they have some flexibility  
11 to decide. I would assume a year later you're  
12 probably looking just for implementation of the  
13 process, because even a year from now you probably  
14 would not have enough experience.

15 CHAIRMAN BONACA: Okay. Well, that was my  
16 thought, in fact, it would be too soon, so probably  
17 you should recommend more than just one step, but  
18 maybe two or three steps over the next few years to --  
19 to assure that --

20 MR. ADER: What we were recommending was,  
21 you know, year after initial implementation you look  
22 to make sure things have been implemented, are  
23 working, or make adjustments if need be. And in the  
24 report I believe it was -- we were recommending on the  
25 order of maybe every three years you go back and do an

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1 overall assessment.

2 Now, it could be you may do a piece one  
3 year and a different piece a different year, but over  
4 a period of time you've assessed the program.

5 MR. LANIK: Charlie, could I add  
6 something?

7 MR. ADER: Yes.

8 MR. LANIK: I think if we look at  
9 recommendation 6, it really does talk about follow up  
10 of individual issues.

11 Now, in many cases like a generic safety  
12 issue, the implementation would be done through some  
13 kind of generic communication, generic letter or  
14 bulletin. And what we're talking about in  
15 recommendation 6 basically is what you're doing for  
16 follow up of a generic communication. And I think the  
17 individual issue will sort of get covered in there.

18 MR. ADER: Which was the generic issue you  
19 discussed yesterday? Was that --

20 MR. LANIK: That was 845.

21 MR. ADER: Okay. And then the final slide  
22 -- and I apologize, I guess I've run a little over --  
23 we're right near the end of the task force effort.  
24 We've provided a copy of the report to the steering  
25 committee. They provided some comments back for some

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1 clarification. We've incorporated those.

2 We've sent it out for broader agency  
3 comment to the regions and the offices. We're hoping  
4 to get comments back towards the end of next week. We  
5 will revise the report as needed, depending on the  
6 comments, and get it back to the steering committee  
7 hopefully by the end of the month. They have actually  
8 give us a week beyond that, but the original schedule  
9 was November, and I'm hoping we can do that.

10 They will then work that through -- senior  
11 management is the steering committee, and ultimately  
12 it will come back to them as -- in the line  
13 organization. The Davis-Besse action plan called for  
14 an implementation plan of the recommendations that are  
15 agreed upon by management in January, with  
16 implementation the end of next year.

17 MEMBER FORD: Why does it take so long to  
18 implement it?

19 MR. ADER: It may take less time to  
20 implement it. It's just that the action plan that had  
21 been laid out -- the Davis-Besse action plan -- had a  
22 schedule of develop an implementation plan based on  
23 our report in January, and implement things by the end  
24 of the year.

25 So it'll be a -- the line organizations

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1 will have to look at their resources, look at other  
2 competing priorities, develop the detailed schedule.  
3 That was beyond the scope of the task force.

4 And we recognized in one of the comments  
5 we got from the steering committee -- is you need to  
6 recognize that this is not the agency's only program.  
7 There are other, you know, key ones out there. Some  
8 recommendations could happen very quickly.

9 MEMBER LEITCH: A couple of thoughts. One  
10 is there is a lot of parallels I think between this  
11 program and what industry calls a corrective action  
12 program or what sometimes is a problem identification  
13 and resolution system. And as you look at those  
14 programs, there are two things that are frequently  
15 problem areas. And both have been discussed here; I  
16 just want to emphasize them.

17 I mean, the collection of the information  
18 is usually not the biggest problem. The biggest  
19 problem is in trending the information and in  
20 effectiveness reviews. And I think you need to be --  
21 others have talked to this as well, but I think both  
22 of those points are very important, that -- because in  
23 trending you can have very minor things. But if you  
24 don't recognize the trend, you can miss the  
25 seriousness of the issue.

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1 I think particularly of issues like hand  
2 switches, the lexan cam follower issue, where these  
3 things have been misoperating for 20 years. And, you  
4 know, occasionally you turn a hand switch and you  
5 don't get the action you expect. Well, that can be  
6 pretty serious.

7 But if it happens once, you've kind of --  
8 oh, well, but there are still ongoing problems with  
9 these lexan cam followers cracking and giving hand  
10 switch misoperations. And I think that has recently  
11 surfaced again. But, I mean, that's not a new  
12 problem. That's been going on onesies and twosies for  
13 20 years.

14 So I think it -- a trending program can  
15 identify that. Somehow you need to say, "Well, there  
16 was a cracked cam follower. That's not important.  
17 Let's just put that on the shelf." But you continue  
18 to get more of those. You need to be aware of that.

19 And then, I think what Steve said, too, is  
20 looking back at, did the action you took get the  
21 results you expected? After an appropriate length of  
22 time, did this bulletin or information notice, or  
23 whatever you did, did that solve the problem?

24 And I really think a lot of your  
25 recommendations here are really subsets of the

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1 recommendation to create a central clearinghouse. I  
2 think once that central clearinghouse is established,  
3 a lot of these other recommendations are really tasks  
4 for that central clearinghouse. So I think that's the  
5 one thing that really needs to happen.

6 MR. ADER: And the central clearinghouse  
7 would not be the organization that does everything in  
8 operating experience. But it would coordinate the  
9 pieces that are going on currently, and then it would  
10 expand that screening and communication role.

11 MEMBER SIEBER: Okay. Any other questions  
12 or comments?

13 I would point out that I thought  
14 personally the report was a good report. It was clear  
15 and easy to understand. I think the recommendations  
16 are appropriate. Basically, this is an in box  
17 problem. You know, you have to identify who gets the  
18 mail, and what they're supposed to do with it when  
19 they get it, and where is it supposed to ultimately  
20 end up?

21 And whether this results in an improvement  
22 or not will be determined by your own assessment that  
23 you have as one of your recommendations to go back and  
24 look at this again. And I encourage you to do that  
25 from the standpoint of, does the process work, but

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1 also from the standpoint of the stakeholders -- are  
2 they getting what they need to do their jobs better.

3 And if there are no comments from members,  
4 I would thank you, Charlie, for your work, and your  
5 task force for a job well done.

6 And, Mr. Chairman, I turn it back to you.

7 CHAIRMAN BONACA: Yes. Thank you. That  
8 was a good presentation, and I think informative.  
9 Hopefully we gave you some good feedback from  
10 experience.

11 With that, I think we will take a break  
12 for lunch now actually. It's -- and come back at 20  
13 of 1:00, okay, so we'll have -- and we then are going  
14 to review the P&P, future activities. And as part of  
15 that, there is a discussion on the retreat.

16 So since the material has been put inside  
17 the package, I think we'll start with that discussion.  
18 I think we should be going off the record now, right,  
19 because we don't have any additional presenters. So  
20 we're not going to be back on record after lunch.

21 With that, we'll take a recess for lunch  
22 until, again, 20 of 1:00. Please be here by that  
23 time.

24 (Whereupon, at 11:44 a.m., the proceedings  
25 in the foregoing matter went off the record.)

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