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PUBLIC MEETING  
BETWEEN U.S. NUCLEAR REGULATORY COMMISSION O350 PANEL  
AND FIRST ENERGY NUCLEAR OPERATING COMPANY  
OAK HARBOR, OHIO

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Meeting held on Tuesday, December 10, 2002, at  
2:00 p.m. at the Camp Perry Clubhouse, Oak Harbor, Ohio,  
taken by me Marie B. Fresch, Registered Merit Reporter, and  
Notary Public in and for the State of Ohio.

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PANEL MEMBERS PRESENT:

U. S. NUCLEAR REGULATORY COMMISSION

- John "Jack" Grobe, Chairman, MC 0350 Panel
- William Dean, Vice Chairman, MC 0350 Panel
- Christine Lipa, Projects Branch Chief
- Douglas Simpkins, NRC Resident Inspector
- Christopher Scott Thomas,  
Senior Resident Inspector  
U.S. NRC Office - Davis-Besse
- Jon Hopkins, Project Manager Davis-Besse
- Keith McConnell, Acting Director  
Project Directorate Three

FIRST ENERGY NUCLEAR OPERATING COMPANY

- Lew Myers, FENOC Chief Operating Officer
- Robert W. Schrauder,  
Director - Support Services
- J. Randel Fast, Plant Manager
- James J. Powers, III  
Director - Nuclear Engineering
- Michael J. Stevens,  
Director - Nuclear Maintenance
- L. William Pearce,  
Vice President FENOC Oversight
- Clark Price, Owner - Restart Action Plan
- Neil Morrison,  
Program Compliance Plan Owner

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1 MS. LIPA: Good afternoon.  
2 We're just about ready to get started. If everybody was  
3 able to get the handouts, I know the FirstEnergy handouts  
4 just arrived a few moments ago, so if you weren't able to  
5 get one, you might go ahead and grab one before we get  
6 started up here.

7 Also, there is plenty of seats up front, if anyone  
8 wants to move a little closer to the front. We won't ask  
9 too many questions.

10 Okay, welcome to FirstEnergy and to members of the  
11 public. I'm Christine Lipa, and I'm a member of the NRC's  
12 Oversight Panel and I'm also the Branch Chief in NRC's  
13 Region III Office. And, my branch has overall  
14 responsibility for the NRC's Inspection Program at  
15 Davis-Besse.

16 We'll go through the rest of the introductions in a  
17 few moments, but I wanted to go to the next slide and cover  
18 the purposes of today's meeting.

19 One of the purposes is to inform the public of our  
20 progress and the Oversight Panel's activities, and then the  
21 second part is to give the Licensee an opportunity to  
22 discuss with us their efforts on implementing their Return  
23 to Service Plan.

24 This meeting is open to the public. And the public  
25 will have an opportunity before the end of the meeting to

1 ask questions of the NRC. This is considered a Category  
2 One Meeting in accordance with the NRC's policy on  
3 conducting public meetings. Before the meeting is  
4 adjourned, there will be opportunities for members of the  
5 public to ask questions or to make comments.

6 We're also having this meeting transcribed to  
7 maintain a record of the meeting. The transcription will  
8 be available on our web page several weeks after today's  
9 meeting. It usually takes about four weeks to get that  
10 posted.

11 The agendas and handouts are available in the foyer  
12 and they're also available on the NRC's Website. You'll  
13 see we have a December edition of our public monthly  
14 newsletter.

15 Also, there is a summary of the Lessons Learned Task  
16 Force Report, the handout of our part of the presentation,  
17 and the FirstEnergy's handouts.

18 We also have some feedback forms that you can use to  
19 fill out and provide feedback to us on how this meeting  
20 goes. We're always trying to improve these meetings.

21 This is the first time we've held the meeting here  
22 at Camp Perry, so we'll see how it works, how easy it is  
23 for everybody to see and hear what we're discussing. Feel  
24 free to give us feedback.

25 I would like to start off with introductions on our

1 side of the table here. On the far left is Keith  
2 McConnell, and he's the Acting Project Director of PD3 and  
3 NRR.

4 Next to Keith is Jon Hopkins and he's the NRR  
5 Project Manager in Headquarters for the Davis-Besse  
6 facility.

7 Next to John is Bill Dean. He's the Deputy Director  
8 of the Division of Engineering in NRR. And, they're all  
9 located in Rockville, Maryland. Bill is also the Vice  
10 Chairman of the Oversight Panel.

11 On my left is Jack Grobe, and he's the Senior  
12 Manager in the Region III office in Lisle, Illinois; and  
13 he's also the Chairman of the Oversight Panel.

14 On my right is Scott Thomas. He's the Senior  
15 Resident Inspector at the Davis-Besse facility.

16 Next to him is Doug Simpkins, and he's the Resident  
17 Inspector at the Davis-Besse facility.

18 We also have several other NRC personnel in the  
19 audience today. Viktoria Mitlyng is way in the back.  
20 She's the Public Affairs Officer at our Region III Office.  
21 Also, next to her is Rolland Lickus.

22 Greeting you in the foyer was Nancy Keller, and  
23 she's the Office Assistant for the Resident Inspector  
24 Office at the Davis-Besse facility.

25 We also have Jay Collins, he is a General Engineer

1 on rotation from headquarters. And we have Ivy Metzel,  
2 she's an Engineer in the NRC Region III Office.

3 Our transcriber today is Marie Fresch from Norwalk,  
4 Ohio.

5 Are there any representatives or public officials in  
6 the room that would like to stand up and introduce  
7 yourselves.

8 MR. KOEBEL: Carl Koebel,  
9 Ottawa County Commissioner.

10 MS. LIPA: Welcome, Carl.

11 MR. PAPCIN John Papcin,  
12 Ottawa County Commissioner.

13 MS. LIPA: Okay, welcome.

14 MR. ARNDT: Steve Arndt,  
15 County Commissioner.

16 MS LIPA: Okay, thanks,  
17 Steve.

18 MR. WITT: Jere Witt, County  
19 Administrator.

20 MS. LIPA: Hi, Jere.

21 Okay, thank you.

22 Lew, would you like to introduce your staff?

23 MR. MYERS: Yes, thank you.

24 We're pleased to be here today. We have several  
25 members in the audience. Bob Saunders is with us, the

1 President of FENOC.

2 Gary Leidich is also here, is Acting Vice

3 President.

4 And we have Kitty, Kathryn Dindo here with us.

5 She's one of our corporate officers of DB and FirstEnergy.

6 Kathy is out there.

7 At our table today, we have Mike Stevens. He's the

8 manager of, the Director of our Maintenance Group.

9 Bill Pearce, V P of Oversight.

10 Clark Price is sitting next to me. Clark is going

11 to brief you on the 350 process some.

12 Neil Morrison. Neil Morrison is on loan with us

13 from our Beaver Valley Plant and he's taking care of our

14 Program Reviews.

15 Jim Powers, the Director of our, Director of

16 Engineering is with us.

17 And finally, Randy Fast is down at the end of the

18 table and Randy will be talking on some of our Containment

19 Health.

20 MS. LIPA: Okay, thank you.

21 MR. MYERS: Also, Bob

22 Schrauder is with us. I'm sorry. I sort of missed that

23 one.

24 MR. PEARCE: Welcome, Bob.

25 MS. LIPA: Okay, next we'll

1 go to the agenda for today's meeting. As you can see, we  
2 will be discussing -- we have these meetings every month,  
3 and we'll provide a short summary of last month's meeting;  
4 and we'll also discuss the NRC's Restart Checklist and the  
5 status of some ongoing NRC inspections.

6 Then we'll turn it over to FirstEnergy for their  
7 presentation on the status of their Return to Service  
8 Plan.

9 Then we'll adjourn the NRC meeting, the business  
10 portion of the meeting, and we'll probably do some  
11 restructuring of our chairs and then we'll have, take a  
12 break and have the public comment and question session.  
13 Then we'll be adjourning the meeting for this afternoon.

14 So, that's the plan. And the next slide is for John  
15 to provide a summary of last month's public meeting.

16 MR. HOPKINS: Thank you,  
17 Christine.

18 First item, last month's meeting we discussed  
19 quality assessment and value added by the QA. Licensee  
20 discussed steps taken along the lines of organizational  
21 changes, stop work orders that were issued, and QA's  
22 involvement and the case study that they performed.

23 With regards to Reactor Vessel Bottom Head Plan; for  
24 background, rust and Boron were found down the, at the  
25 bottom of the reactor vessel head. The Licensee has

1 cleaned that off now, but the Licensee has a plan to  
2 investigate and make sure that that rust and Boron on the  
3 bottom of the head did not come from leaking nozzles  
4 underneath, and rather just came down from possibly washing  
5 down the top.

6 The Licensee's plan is to go to normal operating  
7 pressure and temperature, using reactor coolant pump heat,  
8 no critical reaction, hold there for seven days, and then  
9 cool back down, remove the insulation that's underneath the  
10 head, and go in there for inspection to see if there was  
11 any leakage from the nozzles underneath.

12 There was a meeting about this on November 26th in  
13 Headquarters. And, a meeting summary of that meeting  
14 should be issued in a few weeks, if not sooner. The slides  
15 from that meeting are actually up on the Davis-Besse  
16 Website, the NRC -- the NRC has a Website for Davis-Besse.  
17 If you go there, there is a lot of information, including  
18 the slides from that meeting.

19 The next item discussed last month was System Health  
20 Assurance. The Licensee discussed that they're looking at  
21 calculations and analyses and system descriptions. They  
22 found that common attributes of interest in their reviews  
23 are environmental qualification, high energy line break,  
24 fire protection and seismic qualification.

25 The next item last month was Design Issues



1 Resolution. The Licensee discussed their process for  
2 resolving design basis discrepancies and also the Licensee  
3 stated that their system engineers are now leading the  
4 Readiness Restart Teams for their respective systems.

5 With regards to Management and Human Performance  
6 actions, the Licensee discussed several actions that  
7 they've taken under that. Their Case Study Training has  
8 been completed; there is Revised Leadership Training for  
9 new supervisory personnel; Townhall Meetings, the Licensee  
10 has held with their employees; and they also have a  
11 Management Observation Program, and that was discussed.

12 Finally last month, Operations Leadership Plan was  
13 discussed. The purpose of that plan is to strengthen  
14 operations and prepare it for restart. The Licensee  
15 discussed their vision for operations with regards to  
16 that.

17 One last thing that wasn't discussed at last month's  
18 meeting, but also on November 26th, in Washington, besides  
19 the meeting that we had on the bottom head, there was also  
20 a meeting on what's called the Containment Emergency Sump,  
21 and the Licensee is doing a modification for a strainer for  
22 that sump. And, basically, they're increasing the strainer  
23 size quite substantially. And, again, the slides for that  
24 meeting are also up on the NRC Davis-Besse Website and a  
25 meeting summary for that meeting will come out in a few

1 weeks.

2 MS. LIPA: Okay, thank you

3 Jon.

4 The next slide and the next series of slides; we've  
5 shown the Restart Checklist at other meetings in a table  
6 format. This time we've broken it up into several pages,  
7 but it's really the same items. The Restart Checklist is a  
8 listing of items that the panel has determined necessary to  
9 review before restart can be determined. And so, I'll just  
10 walk through some of these briefly.

11 The first one is the Adequacy of Root Cause  
12 Determination. There are two parts to that. The first  
13 part is the technical root cause on the cracking and  
14 corrosion, and the second part is the Licensee determined  
15 that there were organizational programmatic and human  
16 performance issues that was a contributing root cause  
17 also.

18 The next item is the Adequacy of Safety Significant  
19 Structures, Systems and Components. And there are several  
20 items under there, and we have specific inspections looking  
21 at each of these items.

22 The next slide shows the Adequacy of Safety  
23 Significant Programs. And the Utility is doing reviews of  
24 each of these programs to determine if there is changes  
25 that need to be made to those programs to make them more

1 effective, and we have plans to do inspections on each of  
2 these programs.

3 The next item is the Adequacy of Organizational  
4 Effectiveness and Human Performance. And this is the  
5 second root cause that I mentioned earlier. And we have a  
6 team that's looking at the adequacy of the root cause, what  
7 the Utility has determined for corrective actions and the  
8 adequacy of those, and then the effectiveness of those  
9 corrective actions as they're implemented.

10 The next slide is Readiness For Restart. This will  
11 be later on after these other inspections that I've  
12 mentioned have been completed, where the NRC staff will  
13 perform specific inspections to look at the system, various  
14 systems; Readiness for Restart, Operations Readiness for  
15 Restart, including Operator Training; and the Test Program  
16 Development that the Utility is coming up with to do  
17 testing as they begin to start up the plant.

18 The next item is Licensing Issue and Confirmatory  
19 Action Letter Resolution. There are several relief  
20 requests that are still under review by NRR. And also the  
21 Confirmatory Action Letter, one of the items there is that  
22 the Utility will meet with the NRC to obtain restart  
23 approval before that approval is granted.

24 I wanted to just mention a few upcoming and  
25 continuing NRC inspections. We have the Organizational

1 Effectiveness and Human Performance. That one will be  
2 continuing.

3 The second one is the Safety Significant Program  
4 Effectiveness. The NRC inspectors have reviewed several  
5 programs, but there are several more that we're waiting on  
6 Utility to complete portions of that before we can do  
7 inspections of the programs.

8 And the third item that's not up there is the System  
9 Health Assurance. This inspection was begun and there are  
10 more parts of it that need to be inspected, so that will be  
11 continuing.

12 And then there is also Resident Inspectors, there is  
13 two of them that are at the facility, that's where they  
14 report to every day, and they do day-to-day observations of  
15 operations and ongoing Corrective Action Program items.

16 Also, we have recently issued a couple of NRC  
17 inspection reports, and those should be available on the  
18 web page.

19 I think that's it for our slides, so I'll go ahead  
20 and turn it over to you, Lew, for your part of the  
21 presentation.

22 MR. MYERS: Okay, thank you.

23 We're here today to brief you on our Return to  
24 Service Plan. We have several Desired Outcomes we would  
25 like to accomplish today. The first one is, we would like

1 to demonstrate that we're preparing for core reload  
2 somewhere in the early part of the year, probably in  
3 January. And then operational testing of the Containment  
4 and the Reactor Coolant System shortly thereafter. Mike  
5 Stevens is going to provide you an update of our basic  
6 milestones.

7 We're going to provide you an update of the November  
8 26th meeting that we discussed earlier, and by the NRC, and  
9 where we discussed the Reactor Vessel Bottom Head Issue and  
10 also the Containment Emergency Sump Strainer Modification  
11 that we're making. I think that's extremely unique. Jim  
12 Powers will discuss that.

13 And finally, provide you with updates on some of our  
14 Building Blocks, for example, the Management and Human  
15 Performance area, I will discuss that. Randy Fast will  
16 discuss the Containment and Neil Morrison will discuss the  
17 Programmatic Issues, if you will.

18 Then, finally, I want to provide you some updates on  
19 the status of our work activities, mainly in the 350 area.  
20 That's the NRC process they're monitoring us to. I will  
21 tell you this; other work activities besides that, way over  
22 and above that, that we're doing, that we're not going to  
23 discuss.

24 And finally, we would like to describe some of the  
25 recent FENOC and vendor realignments that we've made to

1 ensure that we're in alignment with our other plants and  
2 can sustain operations and some of the QA oversight that we  
3 have; and both myself and Bill Pearce will provide that for  
4 you.

5 First area is the Management/Human Performance  
6 area. We continue to work hard in this area and we think  
7 make good progress. We have a detailed action plan. For  
8 example, this month, since our last meeting, we've  
9 completed our Safety Conscious Work Environment Training.  
10 That's about two hours of training for each and every  
11 manager supervisor. Total population of about 257 people  
12 at Davis-Besse. It was a pretty aggressive schedule, and  
13 we completed that since the last meeting.

14 Finally, we also did some management team alignment  
15 training, or meeting, if you will. We had 126 people in  
16 that meeting for about four hours. As you can see, this is  
17 a picture of the meeting. Mike Stevens is up on the stage,  
18 stating our organization with our, with our milestone  
19 schedule and how we intend to accomplish that at this  
20 particular part of the presentation.

21 Several other significant improvement initiatives.  
22 The Root Cause Report for Operations. We completed that  
23 and submitted it to the regulatory agency, and I'll discuss  
24 that somewhat later on. We completed that on 11-12.

25 Corrective Action Program Report, we completed on

1 12-5.

2 And implementation of the Management Observation  
3 Program. We started that program, we talked about it at  
4 the last public meeting in October, and then we have data  
5 through December. I'll discuss some of that data. So,  
6 we'll begin, it's a computerized program; we begin to build  
7 up a lot of information from what we're seeing in the field  
8 with our employees.

9 Additionally, we continue forward with the 4-C's  
10 Meetings. That's a group of meetings that I have each week  
11 with employees for two to four hours, pretty open and  
12 candid discussion of compliments and complaints and  
13 concerns; and really has been proven, we've completed those  
14 meetings and that with 318 employees at the site.

15 And finally, we brought in a team of Management  
16 Assessment Firms that we talked about, who we assessed each  
17 and every key supervisor. We committed that at one of the  
18 public meetings. I want to tell you, we're way above  
19 that. We not only done the supervisors, done the managers,  
20 done the senior management team; and even Bob Saunders  
21 himself was out, interviewed with his management firm.

22 And we think what that's going to do for us is help  
23 make sure we have the right people in the right job and we  
24 have smooth programs going forward to ensure that we have  
25 the right standards for those people. And, it was very

1 fruitful.

2 MR. GROBE: Lew, I want to  
3 ask a question, two quick questions. There's been a number  
4 of times where we received inquiries from members of the  
5 public on these various root causes. If I remember  
6 correctly last August, you submitted a broad root cause for  
7 what contributed to the head degradation; how you got  
8 yourself into that situation. And you've been  
9 supplementing that over the last several months --

10 MR. MYERS: Right.

11 MR. GROBE: -- with more  
12 specific and focus root cause assessments in the Operations  
13 Area, Corrective Action Area you mentioned today, and there  
14 has been a number of other ones. Would it be possible to  
15 have you submit those to us on the docket, as they're  
16 approved, so that the root cause that you submitted in  
17 August can be supplemented and updated with more detailed  
18 reviews that you're doing?

19 MR. MYERS: Yeah, we can do  
20 that. No problem.

21 MR. GROBE: Okay, thank you.  
22 One other question. The Management Team Alignment  
23 Meetings, could you go into a little bit more detail on  
24 what the focus of those meetings were?

25 MR. MYERS: You know, one of



1 the things that we did is, we're changing our Leadership in  
2 Action Program. Our Leadership in Action Program is the  
3 Management Supervisory Development Program that we use at  
4 FirstEnergy, at FENOC, if you will. We wanted to brief our  
5 staff on some of the changes that we're making there.

6 So, Randy Fast did some time in that area. We're  
7 going to go back and do some more training. I think it's a  
8 full couple days of training or a day or so, with each,  
9 with the supervisors prior to startup. This was sort of a  
10 kickoff to that.

11 Additionally, each and every director came in, and  
12 myself, and we went through our various plans; whether it  
13 be the schedule of some major activities, reactor coolant  
14 pump work we have going on, reactor cavity seal work that  
15 we're real pleased with, and some of the restraints that  
16 we're finding, if you will. So, we went through those type  
17 of issues also.

18 Also, went through the, some of the various Building  
19 Blocks on, how we got here and what we need to do for  
20 improvement; for example, in the corrective action areas,  
21 we spent some time there. So, it was just, it was  
22 basically like a four-hour meeting to make sure that our  
23 managers and supervisors and so many activities going on,  
24 that we're all vertically aligned and with the same message  
25 going out. We asked for their feedback also. Thought it

1 was an excellent meeting.

2 MR. GROBE: Okay, very good.

3 Thank you.

4 MR. MYERS: There is several  
5 other activities that we now have in progress. One of the  
6 things we told you, the regulators, we would do is an  
7 overview of our engineering area and then an assessment at  
8 the end to ensure that we could support, sustained  
9 operations from an engineering perspective.

10 That organizational review is going on now. We have  
11 four of the top, we think top utility vice-presidents in  
12 engineering at our site now and they're helping us with  
13 that assessment.

14 Additionally, we have, we have the Operations  
15 Section Review, and the Functional Area Reviews, which and  
16 various groups which will be closing out prior to restart.  
17 We'll close that out as part of Restart Readiness Review.  
18 And, we're using the industry performance criteria in  
19 safety focus areas and management areas to help do those  
20 assessments.

21 And, finally, we've done the pilot now for  
22 Operability Determination Training that we'll be putting on  
23 this next month. We think that's going to help us. That's  
24 going to be an Engineering Operations area.

25 I would like to talk for a moment about the

1 Management Observation Program. You asked us to discuss  
2 that some once we had more data in there.

3 Right now we're in the deep drain window of our  
4 plan. That's sort of a unique place that you can only go  
5 to when the fuel is unloaded. That's allowing us to work  
6 on a lot of valves and equipment that typically you only  
7 get to work on a few times in the life of the plant.

8 What we did to ensure that we had good management  
9 oversight involvement in the containment, we assigned each  
10 and every job in that area to one of our managers to  
11 provide some oversight. So, that's well underway and doing  
12 well.

13 We've had good management response. Hundred percent  
14 of the observations have been completed. We find that we  
15 have a lot of, lot better interfacing, interacting with our  
16 people, especially across organizational boundaries, we're  
17 seeing improvements there. And we're really focusing on  
18 standards and intrusive management involvement.

19 I think that's sort of a change at our plant. If we  
20 would have done that maybe a little better, we may have  
21 seen some of these head issues a little quicker. So, we  
22 think the management observation is a key part of our  
23 ongoing program.

24 The next slide. If you look what we've done, 616  
25 observations in November. 4,195 safety attributes were

1 evaluated. 91 percent were completed satisfactory. What  
2 that means is some things required some coaching.  
3 Additionally, there is 3,910 standards verifications, 91  
4 percent of those were completed satisfactory.

5 And finally, what are we seeing in, well, we're  
6 seeing problems, if you go to the next slide, some  
7 housekeeping. People leaving tools around, and not leaving  
8 the area in as good a shape as they should. The quality of  
9 the observation documentation, gives some specific examples  
10 of that.

11 Inconsistent use of the condition reporting system.  
12 For example, you would think if you, our standards are not  
13 real clear, we're going to fix this. We would think if you  
14 marked something unsatisfactory, that it would require a  
15 condition report. So, we have to go back and clarify that;  
16 so it's telling us that.

17 Then, finally, preparation of activities. We're  
18 seeing a lot of cases where we're not as effective and  
19 efficient as we should be making sure we have proper safety  
20 gear and proper tools when we get to a job, so that's  
21 causing delays and some confusion and keeping some of our  
22 work from going as effectively and efficiently as it  
23 should.

24 The next area that I was going to discuss somewhat  
25 is the Operations area.

1           MR. GROBE:           Lew, before you  
2 get into operations, could you give an example or several  
3 examples of what you consider safety attributes that you're  
4 evaluating and what are standards that you're evaluating?

5           MR. MYERS:           Let's see if I've  
6 got that here. It wasn't a question that I thought you  
7 would ask.

8           MR. GROBE:           Predictable is  
9 not the goal I'm after.

10          MR. MYERS:           You know, if I go  
11 look at the safety type attributes, what we look for there  
12 is a good prejob briefing practice. I mean, one of the  
13 things we try to do, ensure when you go on a job, you have  
14 the right tools, you know what to expect, you know what the  
15 backout criteria is when you stop a job, things like that.  
16 And, we're, we're probably seeing some procedure usage,  
17 some things in that area.

18          MR. STEVENS:         If I could add to  
19 that.

20          MR. MYERS:           Yeah, give us a  
21 little help.

22          MR. STEVENS:         Some of it is not  
23 what we would expect and we're reinforcing that. And the  
24 standards, some of the observations I've had and some of  
25 the other folks that I know about, we don't have the proper

1 barricade. We don't have it, we may have the area roped  
2 off, we don't have it roped off exactly in accordance like  
3 with, there may be a piece of the sign is not labeled  
4 correctly, it's not identifying the barrier or we're not  
5 removing it when we're done.

6 I was in the ~~terminal~~ turbine building this weekend. There  
7 was a sign that said overhead work. That work was done.  
8 There is no overhead work. That sign needs to be removed  
9 and it wasn't broken down at the end of the job.

10 Those kind of observations are being followed up  
11 with supervision. This new observation program is really  
12 neat. I like it, because you can click on the individuals  
13 that maybe you didn't contact, talk to their first line  
14 supervisor. But then the superintendent or manager, you  
15 can click off and send that observation to them and then  
16 follow-up. Also, it goes into a data base; it's easy to  
17 find, easy to use and easy to look for common issues. It's  
18 really a good data base.

19 MS. LIPA: You mentioned  
20 three part communications; is that an expectation in the  
21 maintenance department?

22 MR. STEVENS: Absolutely. And  
23 we defined that clearly so there is no misunderstanding on  
24 how we expect to do that and how it relates to the safe  
25 operation of the plant.

1           MR. GROBE:           Possibly that's  
2 vernacular that members of the public wouldn't be aware of.  
3 Could you explain what three-part communication mean?

4           MR. STEVENS:        Yeah, three-part  
5 communication is where the message is communicated, the  
6 receiver repeats that message back and then the sender  
7 confirms that message. So, if I said, you know, we're  
8 going to work on core flood one problem. Understand, work  
9 is ready to proceed on core flood one problem. That's  
10 correct. That would be an exchange of three-part  
11 communication, and as well as the phonetic alphabet. It  
12 ensures that we understand each other when we're  
13 communicating and don't get on a wrong component or don't  
14 take an unintended action.

15          MR. MYERS:        One of the  
16 things I want to talk about, example of one of the issues  
17 we found that was fruitful, was during our deep drain  
18 window, Scott Wise, one of our operations shift managers,  
19 was monitoring the work activity and repacking the valves,  
20 stuff he found. One of the things that he went and did is  
21 they changed the tooling out; and he went and got a  
22 different type of ~~baroscope~~ boroscope that they could use to do  
23 inspections with that's helping the mechanics get their job  
24 done a lot better.

25          We wrote that up in one of our observations, and

1 it's really a good catch, and helped us improve the  
2 efficiency of the job or do stuff, everything else. So,  
3 that's the kinds of things we're looking for. So, that  
4 worked out well.

5 MS. LIPA: I had one more  
6 question for you, Lew. You mentioned Operability  
7 Determination Training; what's the timeline for that  
8 training?

9 MR. MYERS: I think we're  
10 going to have that done at the end of this month.  
11 This month?

12 MR. POWERS: This month,  
13 Christine, and going into early January.

14 MR. MYERS: Can you explain  
15 that?

16 MR. POWERS: Much of that  
17 training is going to occur this month and go into early  
18 January. We piloted it this past week with a  
19 multi-discipline class of both operations and engineering  
20 sitting in and going through it and putting the Ops  
21 Manager, the Design Manager, myself, and Randy Fast as well  
22 were in there, and now roll it out to the balance of the  
23 Operations and Engineering staff. So, there is a number of  
24 sessions in it, and rather large classes, so it's a major  
25 training issue we got.



1 MS. LIPA: Thank you.

2 MR. MYERS: The next area I  
3 want to touch on just for a moment was the, we did the  
4 overall Root Cause we shared with you sometime ago. There  
5 were some specific areas we said we would go back and look  
6 at; for example, Operations. We completed that root cause,  
7 and one of the things, the major issue that we have there  
8 is you go look at the senior management support for  
9 Operations leadership role. And let me tell you that we  
10 believe that Operations leadership role at our sites is  
11 extremely important, to ensure we had safety; and that was  
12 lacking somewhat.

13 So, we're going back now, try to ensure that we have  
14 the good Operations leadership model at our plant that we  
15 need. We think we have some of that pretty well lined up  
16 at our other plants.

17 You know, we brought Mike Ross in. He's been  
18 working with the crews. I've been working with the  
19 Operations crew myself; and Randy has. We've been meeting  
20 with all the crews. We have a standard order that we've  
21 drafted, go to the next slide, to discuss what we consider  
22 the leadership role of our shift managers. Trying to get  
23 that drafted in a manner so it's consistent at all three of  
24 our plants. So, I'm probably the holdup on that now.

25 With our new, with our new Ops Manager, we're

1 receiving great feedback right now from the Management Team  
2 that we brought in, that Operations is very much vertically  
3 aligned from myself to Randy, and down through the Ops  
4 Manager; and the organization morale seems to be pretty  
5 good.

6 There is a high level of Operations involvement that  
7 we're trying to improve, and we're stumbling sometimes, at  
8 each one of our plants. For example, the System Readiness  
9 Reviews, Operational Reviews, we're involved in operations;  
10 Latent Issues Reviews, Outage Modifications and Work  
11 Support Center.

12 And, finally, if you go look at one of the things I  
13 think we've done to improve the operational support at our  
14 plant, you know, most of the managers we brought in are  
15 ex-senior reactor operators or certified individuals. For  
16 example, I've had a couple SRO's, you know, the maintenance  
17 manager is a previous SRO; Steve Loehlein is a  
18 certification that we brought in. So, many of our managers  
19 that we brought in are very strong from an operational  
20 standpoint. We think that's going to lead us ahead in the  
21 future when we restart the plant.

22 MR. DEAN: Excuse me, Lew,  
23 before you go on. As I recall from previous discussions,  
24 you had brought in some outside mentors in the Operations  
25 area. Are they still on site? What role do they play?

1           MR. MYERS:           Mike Ross is here  
2 with us today, yes.

3           MR. DEAN:           What role are they  
4 providing? Are they still observing on shift activities?

5           MR. MYERS:           Observing on shift  
6 activities, providing some benchmarking, everything --

7           You want to go ahead, Mike? You went to six plants,  
8 I think, right? So, might as well call on him.

9           MR. ROSS:           I'm Mike Ross.  
10 Yes, in the Operations Group, we benchmarked three  
11 different facilities with a six-man team. We have a number  
12 of activities in the Operations area designed to be totally  
13 involved and move forward in the future and sustain  
14 performance. I can go through a list.

15           MR. MYERS:           We also have our  
16 Ops Manager with us here, Mike Roder. Do you have anything  
17 that you want to add in that area?

18           MR. RODER:           I could, I don't  
19 have anything specific. Just that Mike Ross is here, and  
20 he's been an invaluable resource to me, as well as Randy  
21 Fast.

22           My name is Mike Roder by the way.

23           But also, the industry peers, we have going out and  
24 benchmarking. I have been visiting with my peers at both  
25 the Beaver Valley Plant and Perry Station on a monthly

1 basis; involving our shift managers in that discussion, so  
2 we can gain from their experiences. And we have, this week  
3 we have industry peers through the Institute of Nuclear  
4 Power Operators here on site providing some other  
5 feedback.

6 So, as far as mentors, we're looking for as much  
7 input as we can get. We're doing a lot of benchmarking, a  
8 lot of gathering of information.

9 MR. DEAN: Mike, if there  
10 were two or three things you could point to as whether  
11 they're valuable lessons learned or insights that you've  
12 gathered from this benchmarking that you're attempting to  
13 apply here at Davis-Besse, what would those be?

14 MR. RODER: Really, the first  
15 and foremost is looking at, you know, Lew had mentioned the  
16 Ops leadership role, and our not meeting the mark  
17 previously in that role. One of the best benchmarking  
18 opportunities we had was to see how that is exactly, or how  
19 that's exhibited at other facilities. Where does  
20 Operations assert themselves? Where are the decision  
21 points where Operations needs to be there?

22 And we have, like Mike Ross mentioned, we have  
23 six-man teams for equipment operators, reactor operators,  
24 senior reactor operators and management personnel that  
25 went, visited three, actually four different sites; and we

1 were able to, to instill in ourselves the vision of what  
2 Operations leadership means, not only in my eyes, but in  
3 all my superintendents and several of my shift managers'  
4 eyes, so we can carry that forward.

5 MR. DEAN: So, you're  
6 gathering insights in terms of how Operations can assert  
7 itself in a leadership role. I mean, that's a nice  
8 platitude. I guess in terms of practical application, what  
9 are some of the things you can point to that you are  
10 imbedding into your operational flaws that weren't there  
11 before.

12 MR. RODER: I can put one,  
13 just moments ago before I came here, we had all of our  
14 managers together in a manager meeting; and I am driving as  
15 Ops Manager, I am driving several different issues within  
16 the manager team to resolution, all directed towards plant  
17 restart. So, from my role as the Ops Manager, we have  
18 instituted at manager meetings, and we're driving several  
19 issues through that team, myself being a lead for that  
20 team.

21 MR. MYERS: Also, I think we  
22 have the management operations, you would not have a shift  
23 manager out doing management operations of maintenance work  
24 activities and documenting it in the past, I don't  
25 believe.

1           MR. RODER:        Right. That was  
2 very limited, and here we have several indications that our  
3 shift managers are leading the way, both performance of  
4 work and safety standards and upholding safety standards of  
5 the site, not focused on operations necessarily, but the  
6 standards of the site.

7           MR. DEAN:        Okay, thanks,  
8 Mike.

9           MR. MYERS:        I think that was  
10 an interesting comment, rather than Operations looking at  
11 the small operations group, you know, they need to be  
12 looking at the entire operations of the plant, and  
13 broadening that perspective is one of the key things that  
14 we have to do.

15         You know, I think that getting management team we  
16 put in place has served as SROs, you know, is going to  
17 strengthen that Op, that involvement of the Operations  
18 group. For example, the Design Engineering Manager we  
19 brought in, and Jim Powers also, they're all SRO's. First  
20 thing that happens -- and that's a Senior Reactor Operator  
21 License, by the way.

22         First thing that happens, we want something done,  
23 automatically we can ask, can we get Operations involvement  
24 in that decision now. We're doing that in the system  
25 walkdowns, and these latent issues reviews, we're even

1 trying to get them involved in that. So, I think you're  
2 going to see a lot more operations mentality and ownership  
3 when our station is started up.

4 MR. DEAN: It may be a little  
5 premature now in the fact that you're still kind of in  
6 analysis-engineering-maintenance type of mode of activity,  
7 but I think we would be interested in seeing perhaps a  
8 better description later on in terms of how Operations is  
9 indeed integrating itself into other plant activities to  
10 provide that leadership.

11 MR. MYERS: Maybe we can  
12 bring one of our shift managers to one of the meetings and  
13 provide us some feedback.

14 MR. DEAN: That would be  
15 great.

16 MR. MYERS: Okay. The next  
17 area we'll discuss is Mike Stevens. He will provide you  
18 with some overview of our restart efforts, if you will.

19 MR. STEVENS: Thanks, Lew.  
20 I'm really excited about the amount of maintenance  
21 that's going on at the Davis-Besse Plant. Our vision is  
22 operational excellence. And in the Maintenance Department  
23 we've come up with our mission is to provide planning and  
24 scheduling and implementation of maintenance modification  
25 activities that ensure excellent material conditions, which

1 we believe yet to have excellent material conditions for  
2 operators. And that's what we're doing at the plant right  
3 now.

4 We took a unique opportunity and drained down the  
5 Reactor Coolant System to go work 74 valves; walk off the  
6 Reactor Coolant System. They're the first off valves.  
7 They're the valves Lew just talked about with the  
8 management observations. I think that's great. And it  
9 will ensure that we have good, tight Reactor Coolant System  
10 at those isolation valves. Also, it helps us be able to  
11 take other valves out of service and do that vent free and  
12 continue our maintenance activities.

13 We took the Reactor Coolant System cold leg ~~resistant~~  
14 resistance temperature detectors (RTDs) apart. We took them out of  
15 the plant. We made a modification and resolved a  
16 longstanding problem with very small minute leakage to  
17 demonstrate to the folks involved with that, that we're  
18 intolerant of even the smallest reactor coolant system  
19 leakage; and got that problem behind us. We did that by  
20 welding in new thermal welds and installing new RTD's.

21 We performed an inspection of our high pressure  
22 injection thermal sleeves. It was an industry problem out  
23 there. We inspected all four. We're going to replace two  
24 of them.

25 Our reactor coolant pumps; we took two of the



1 reactor coolant pumps apart and we're resolving the  
2 longstanding gasket leaks with the casing gaskets on those  
3 pumps. We're going to install a new style gasket and put  
4 them back together to make sure they're leak tight.

5 MR. HOPKINS: Question on the  
6 thermal sleeves, have you done some sort of evaluation and  
7 determined that's Part 21 compatible?

8 MR. FAST: That's a good  
9 question. I don't know if I can answer that. If it's Part  
10 21. It's something that the industry has knowledge of. In  
11 fact, it's being treated as maintenance activity because  
12 it's a replacement item. We had one in the warehouse. We  
13 had done nondestructive examination testing during the 13th  
14 refueling outage using radiography, but we took this unique  
15 opportunity to go in with ~~baroscope~~ boroscope, and we saw minor  
16 cracks on the leading edge of those thermal sleeves.

17 That has been reported. I don't know if it was  
18 reported through the Part 21 requirement. I can take that  
19 action and find out. But it is an industry understood  
20 issue. It's being replaced with a like for like. We had  
21 the spare. We had one spare available and we procured a  
22 second spare and that work is in progress to replace those  
23 thermal sleeves.

24 MR. HOPKINS: I think it should  
25 just be followed up. I mean, here's the question of

1 possibly of safety significance; you know, hearing minor  
2 cracking, I haven't heard anything that strikes me too  
3 much, but yeah, I don't see any reason why you're unique  
4 versus other plants in that regard.

5 MR. FAST: The only question  
6 I can't answer is has it been actually recorded under Part  
7 21; and I'll follow up with that.

8 MR. MYERS: These have been  
9 replaced. We replaced one here before. I know of other  
10 plants we replaced those also. So, we'll go look into  
11 that. That's a good question.

12 MR. THOMAS: Does your  
13 maintenance program account for periodic evaluation of  
14 these thermal sleeves? You've identified, this is the  
15 second time you've identified issues with these thermal  
16 sleeves at this facility. Is there, is something in your  
17 maintenance program to look at these periodically?

18 MR. FAST: It's integrated  
19 into our in-service inspection program. It was done as a  
20 routine activity during the 13th refueling outage.  
21 However, as I said, we used radiography, which was  
22 inconclusive. We took this opportunity to actually do a  
23 ~~baroscopic~~ boroscopic inspection, so that was more telling in being  
24 able to discern minute cracks.

25 MR. DEAN: I wanted to ask a

1 question about, Mike, you outlined a number of actions that  
2 you have taken and are taking relative to assuring a  
3 greater degree of leak tightness at the plant, as you  
4 will.

5 These major issues that you described, are those  
6 mostly an outfall of the effort after the plant shut down  
7 in March to look at the integrated Reactor Coolant System  
8 for leaks or some of these items that have been  
9 longstanding issues that you're taking the opportunity to  
10 look after now?

11 MR. STEVENS: I think it's a  
12 combination of both. There are some things we did to the  
13 plant that have developed into more improvement safety  
14 margin, improving the material condition. I think we've  
15 gone above and beyond in some areas, like the emergency  
16 sump. I think we're demonstrating a model for the industry  
17 there. I think we could have, we're doing those kinds of  
18 things to the plant that has been a part of the review, as  
19 well as longstanding latent issues that we resolved.

20 MR. DEAN: I guess what I was  
21 looking for, you know, in terms of a linkage between  
22 efforts for the plant to go into some extensive discovery  
23 mode to look for issues. I guess I was trying to get a  
24 sense of these things that you've described, how much of  
25 that emanated from that activity, and how much of these

1 things were already on the books as issues that, you know,  
2 you were going to get around to at some point?

3 MR. STEVENS: The reactor  
4 coolant pumps were already on the books. We put an extra  
5 ring of packing and rechecked the packing in decay heat  
6 12; extra ring of packing. That was something we did new  
7 that wasn't out of a review or action, it just, since we  
8 were taking the opportunity to drain the system, we drained  
9 down and it's one of the three valves that, in the deep  
10 drain that we took an opportunity to go do as part of the,  
11 over and above, the ensure that we don't have to come back  
12 and address another problem later on; we're very  
13 comprehensive.

14 MR. MYERS: Let me add  
15 though, we went into this outage, reactor coolant pumps, we  
16 knew they had some seal leakage at the bowl, but they were  
17 not in the outage. And we made a management decision,  
18 myself and my team made a management decision to go replace  
19 them. Go into two of these reactor coolant pumps and pull  
20 the rotating assembly out.

21 Anybody in here that's ever done that, this is a  
22 major job, the motors on these pumps are probably the size  
23 of a normal room in a house. So, we had to pull the motors  
24 and impellers and shaft, and go into the pumps. And it was  
25 fairly costly, but we made that decision to go in two of

1 them, and we'll do two the next refueling also.

2 That's the approach we're taking right now. Once  
3 again, we wanted to demonstrate a standard; we knew those  
4 seals were leaking and it was an opportunity to go after  
5 them. So we did that.

6 MR. DEAN: Okay.

7 MR. STEVENS: Next is the  
8 completion of what's required for Mode 6. Mode 6 is when  
9 we put fuel in the reactor and begin returning the plant  
10 back to operations. Our operations, you asked earlier,  
11 Dean, where the SRO's and shift managers are setting the  
12 standard. I think this is a good example where they're  
13 done taking the Mode 6 checklist and are actually driving  
14 the rest of the organization for the standard of response  
15 for some of the items that are holding going to that mode;  
16 not just to close out the paper, but really drive what is  
17 the resolution that we're looking for, what do I need from  
18 you to be able to close this item out; and they're doing  
19 that proactively.

20 We modified our main fuel handling bridge, so we can  
21 move fuel more reliably and safely in the reactor vessel.  
22 That was a pretty extensive modification. It's nearing  
23 completion. We replaced the electrical components on the  
24 bridge as well as the motors.

25 Emergency sump strainer. We're replacing that

1 strainer, putting in a whole new design. I think it will  
2 be the model for the industry.

3 We have Reactor Coolant 46 and 47. We're not  
4 satisfied with just replacing this drain piping, but we're  
5 actually going to modify it and change its design a little  
6 bit, so we have good leakage, this line goes between our  
7 reactor head seals; the inner and outer seal for the  
8 reactor head; and that will give us good monitoring should  
9 that seal start to leak.

10 We're installing the permanent reactor cavity seal  
11 plate and setting a standard for excellence, and we won't  
12 have Boron running down the walls should the seal plate  
13 leak. We're going to remove that altogether.

14 Going onto Operational Testing. Currently, our  
15 plans are to reload the core in mid January. We're going  
16 to install the reactor head and enter Mode 5. Fill and  
17 vent the Reactor Coolant System. That will be our first  
18 opportunity to look for leakage on components, reactor  
19 coolant pumps, some of these valves. Then we'll perform an  
20 integrated leak rate test of the containment latter part of  
21 January.

22 In between core reload and now, we're looking at  
23 fitting our reactor head up to the reactor vessel and  
24 ensure that it will fit and our alignment blocks and all of  
25 our measurements do in fact match, and reactor head is

1 good. And have it support some shielding for us while we  
2 work in the reactor cavity and in and around these drain  
3 lines.

4 MR. MYERS: Let me interrupt  
5 for a second. One of the things we talked about is reactor  
6 cavity seal mod that we're making now. What that is,  
7 during every refueling, you have your reactor vessel and  
8 you need to flood the reactor vessel area or the reactor  
9 cavity and canal, so you can refuel. You put about 30 feet  
10 of water above the reactor flange or 21 feet to do that.

11 Well, you know, to do that, you typically go down  
12 and put a temporary seal plate and you bolt that down in  
13 place, it's probably 14, 18 foot diameter, just guessing,  
14 but it's a pretty deep plate. Comes in section. You have  
15 to put that in place. And it's an obvious path for  
16 some minor leakage during the refueling outage. That may  
17 have been where some of the Boron on the undervessel where  
18 water dripped down and went on the side of the vessel,  
19 during the refueling.

20 You know, as Chief Operating Officer of the company,  
21 and VP, one of the things I always said in my life when I  
22 was a young ~~help~~ health physics technician and operator, if I ever  
23 had the chance to get rid of this problem, I would do it.  
24 So, install a temporary seal in the area, and it's just,  
25 there's just got to be a better mouse trap.

1 Several plants have installed what's called a  
2 permanent cavity seal over the past few years. It's a  
3 permanent seal that's in place, so that you don't have to  
4 install this every outage, which is a pretty expensive seal  
5 to install, in the millions of dollars.

6 What we've done at our FENOC ~~plants~~ plants, all three of our  
7 pressurized water reactors have permanent cavity seals in  
8 them. This will be the final one. So, you know, I think  
9 that puts us in good stead from a leakage standpoint, and  
10 also, now that these questions are coming up about Boron  
11 under the vessel, you know, will help us out.

12 So, I'm pleased to sit here today and say that we  
13 will start this plant up. And, if you look at all three of  
14 our pressurized water reactors, all three have permanent  
15 cavity seals when we start up. I think that puts us in  
16 good stead as a company.

17 I'm sorry.

18 MR. STEVENS: No, that's okay.

19 Thanks.

20 MR. MYERS: I'm passionate  
21 about these things.

22 MR. STEVENS: That's okay. Next  
23 slide.

24 Reactor Coolant System. Mode 4 and Mode 3. This is  
25 where we'll heat the plant up without nuclear heat, and



1 perform our inspections. This is under decay heat pit  
2 modification, will be completed. This is a good activity  
3 in that. In the past we've had this pit, has a cover over  
4 the top of it, bolted it up and checked it for leaks, and  
5 we put sealant around it.

6 It's a very intensive task, time consuming, doesn't  
7 look very good. And we've decided to take advantage of  
8 this time and go put a modification in that will actually  
9 seal that pit and protect the components inside of it.  
10 That entails installing some quarter inch stainless steel  
11 plate. We have about a quarter of a mile of welds to  
12 make. We borrowed some procedures from Davis-Besse,  
13 running them through our process. They're taking and  
14 mocking that up with plexiglass sheets to ensure that,  
15 because it's easier to cut, and make sure that we have the  
16 pieces fit correctly, and then we're making it in the shop  
17 and we'll take it into the pit and install it.

18 Emergency sump, Steve and them are doing a really  
19 good job implementing the modification for the strainer.  
20 We're putting W-4 beams across the top of the sump. There  
21 is 9 of them. We have one installed. After the beams are  
22 in place, we'll bring the strainer media in, complete out  
23 the top piece. Jim is going to talk a little more about  
24 the emergency sump.

25 I talked about the reactor coolant pumps and the

1 maintenance that's ongoing there. And the mechanics are  
2 going to replace the reactor coolant pump seals; we have  
3 them being rebuilt.

4 Containment air coolers, we're pretty much  
5 rebuilding that from the ground up. We've got the motors  
6 reworked. We've got duct work out refabbed and going back  
7 in. We've got new cooling coil. We're going to start  
8 fabricating the service water connection in the shop next  
9 week. And, then we'll have everything we need to go  
10 through that normal operating pressure and temperature  
11 check. And to do that we'll have to complete our Safety  
12 Functionality Reviews.

13 Next slide.

14 MS. LIPA: Before you go on,  
15 Mike, you mentioned the Safety Functionality Review. I see  
16 later in the presentation there will be some discussion of  
17 System Health, so we can wait until later, but my question  
18 is, how are you going to be addressing the safety, the  
19 safety system health assurance problem on 3 and 4, what's  
20 the plan for that?

21 MR. STEVENS: Well, any -- do  
22 you want to answer that?

23 MR. POWERS: All of the issues  
24 that we've uncovered as part of our discovery activities  
25 that are related to modes 3 and 4 have mode change

1 restraints on them that have been applied by our licensed  
2 operators. Each time we find an issue at the plant and  
3 identify a potential concern, we document it in our  
4 Corrective Action Program. Those CR's, as we refer to  
5 them, go through the control room as far as routing  
6 process, and the control room will take out a restraint on  
7 a mode change if there is any question about the equipment  
8 performing, its capability to perform its safety function.

9 So, we've got a rigorous process in place where we  
10 know the list of things that need to be done and resolved  
11 to clear Mode 3 and 4. Part of that is the Safety  
12 Functionality Review that the systems will perform the  
13 safety function.

14 MS. LIPA: You going to get  
15 into that Safety Functionality Review in more detail later  
16 today?

17 MR. POWERS: Yes, I will.

18 MS. LIPA: Okay, thank you.

19 MR. STEVENS: Thanks.

20 Next slide.

21 To do that test, we'll have to have a secondary  
22 system back and be able to support pulling a vacuum in our  
23 main condenser. We've done that once already since we've  
24 been down. You remember we talked about the leakage and  
25 the way we put the new coating on the main condenser.

1           Operations will complete the simulator training just  
2 in time, and then we'll do our heat up. And this will be a  
3 good opportunity for us to test all of our systems. We're  
4 going to do that. And we'll cool down and do, and perform  
5 any other necessary maintenance.

6           MR. GROBE:           Mike, hang on for  
7 a second. Is there something controlling the volume on the  
8 microphones?

9 (off the record.)

10          MR. STEVENS:        What I want to  
11 close out with, before I turn it over to Randy is, when we  
12 go to heat up, we'll have to have most if not almost all of  
13 the plant systems required. And, we've been down for a  
14 year. We're going to take the opportunity to run those  
15 systems, make sure we understand how they're operating and  
16 that they do meet expectations and are in good operating  
17 order. And if they're not, we'll go perform required  
18 maintenance that's necessary to get them to that point.

19          So, it's a series of testing that will go on with  
20 bringing this plant back, as well as, we talked, the seven  
21 day duration of holding that pressure and doing the  
22 inspections on the Reactor Coolant System primary.

23          MR. GROBE:            Could you give us  
24 a sense of how many mode restrictions there are in each  
25 mode?

1           MR. STEVENS:       I know there is  
2 189 -- well, I have to change that up, because we have some  
3 down. There is 160 some for Mode 6. 400, well, about 400  
4 and some for Mode 5 -- 4. I just saw, Jack, I just saw  
5 that performance indicator this morning; and the relative  
6 peaks, there is more for Mode 4 and 3 than there are for  
7 the others. And that's really where we're going to bring  
8 the systems back.

9           MR. COLLINS:       Jay Collins. If  
10 you could speak closer to the microphones on both sides,  
11 there are some problems hearing in the back and that might  
12 help with the distortion. Thank you.

13          MR. GROBE:        Thanks, Jay.

14          MR. STEVENS:       I could say this,  
15 there is about a hundred and a half Mode 6. About three  
16 times that for the next mode change to Mode 4. Mode 5,  
17 there is a handful associated with the reactor head. And  
18 Mode 2, there is about a couple hundred. And I'm trying  
19 to --

20          MR. MYERS:        If you want the  
21 exact numbers, we can get you the exact.

22          MR. GROBE:        No, that's fine,  
23 I just wanted to get a sense.

24          MR. STEVENS:       That's misleading,  
25 because each one of the mode restraints condition reports

1 have an issue in and of itself that needs to be addressed;  
2 and those, one of the guys that was pulling, pulling them  
3 through report this morning, there is like 50 some odd  
4 systems touched by this one mode restraint, and a hundred  
5 actions. So, there is a significant amount of work.

6 But I think we can, I know we're up to, we're up to  
7 it. We've got the right logistics in the schedule. The  
8 schedule is driven off these milestones. We're bringing  
9 the systems back to the plant and we'll just have to go  
10 through that.

11 MR. MYERS: Okay?

12 MR. STEVENS: With that, I'll  
13 turn it over to Randy.

14 MR. FAST: Just looking for  
15 those mode changes. I have them somewhere as well. We'll  
16 have to find those for you.

17 Thank you, Mike.

18 Good afternoon. Pleased to meet with you today and  
19 bring us current with our status of Containment Health.  
20 And, since we met last, we have completed all of our  
21 scheduled inspections as part of the Containment Health  
22 Plan, including the boric acid extent of condition, the  
23 equipment qualification inspections, containment and liner  
24 inspections and the containment coatings inspection.

25 The results of those inspections. 511 condition

1 reports were initiated by the inspection program.  
2 941 of those were directly related to the boric acid  
3 extent of condition. Now out of those items, no  
4 significant material conditions existed, other than really  
5 I think the most significant component or system that was  
6 impacted were the containment air coolers. And the  
7 containment air coolers is a ventilation system that  
8 distributes air throughout containment, and so there was  
9 degradation of that system.

10 But, if you look at some of the other, of the  
11 evaluations, or excuse me, the significance, things like  
12 the qualified equipment, equipment qualified components, I  
13 think we target 159 inspections. All of the equipment  
14 inspected would have met its design requirements. There  
15 were no operability concerns for that.

16 Now, out of this population of inspections, we have  
17 about 250 evaluations that are currently in progress by our  
18 engineering staff. We have 478 of these evaluations that  
19 are undergoing supervisory and management review. And  
20 we've shored that up; we have several of our folks, in  
21 fact, we had some of our senior reactor operators involved  
22 with this process to ensure the corrective actions we're  
23 taking are appropriate. 181 of the evaluations have been  
24 completed and 32 are closed.

25 So, as you see that last bullet -- I'm a little

1 challenged with not being able to see the screen here --  
2 but we did not have any equipment qualification that was  
3 impacted as a result of these inspections.

4 Next slide, please.

5 MR. GROBE: Randy, before you  
6 go on. Can everybody hear me? Is that okay? I saw a nod  
7 in the back row there.

8 I'm having a little trouble understanding the first  
9 two bullets. 511 condition reports were initiated through  
10 your inspection program and there is an additional 400 and  
11 some condition reports that were initiated from some other  
12 activity; is that my understanding?

13 MR. FAST: Jack, we go back  
14 to the actual Containment Health Program had key elements  
15 of it; one of which was look at extended condition,  
16 degradation or impact on equipment, structures, systems and  
17 components because of boric acid. As part of the  
18 inspection additionally we did Alloy 600. So, any  
19 connections. We did the upper head, the lower head, and as  
20 well, general inspections, looking for any degradation or  
21 any issues associated with material condition. So, those  
22 were categorized a little bit differently, so the  
23 population that you see, the 941, are directly related to  
24 boric acid inspections.

25 MR. CHAMBERS: Randy, those



1 also -- my name is Tim Chambers. I just want to clarify,  
2 those also include the inspections that we did outside  
3 containment in the 941. So, those boric acid inspections  
4 were outside containment, that's why that number looks  
5 higher.

6 MR. FAST: Thank you, Jim.

7 Is that clear?

8 MR. GROBE: Yes, I have a  
9 question regarding your next bullet. Help me understand  
10 the level of activity remaining. Once you complete a  
11 condition report evaluation, you identify what corrective  
12 actions are necessary for that condition report; is that  
13 right?

14 MR. FAST: That's correct.

15 MR. GROBE: So, there is two  
16 thirds of the these 941 that you have not yet completed the  
17 evaluation on to identify the corrective actions.

18 MR. FAST: That's correct.

19 MR. GROBE: Okay.

20 MR. FAST: As part of our  
21 Containment Health Assurance Program, the ongoing work that  
22 we have, the emergency sump screen. And I have  
23 photographs. I'm going to get into a little bit of detail  
24 about what these items are, but as well Jim will brief us  
25 on the design change process. The decay heat valve pit

1 Mike was talking about, and just in the way of correcting,  
2 we actually got a welding procedures from Beaver Valley, it  
3 was a mig process, which will really be a little quicker  
4 for us and give us good results. So, we are mocking that  
5 up with plexiglass, but we'll line that with stainless  
6 steel.

7 The containment air coolers, as Mike had said,  
8 effectively totally rebuilt. The ~~outlook plant~~ output plenum on the  
9 dropdown dampers, the cooling coils, new motors and the  
10 things have been completely reworked. We have pictures  
11 that I think will help in that way as well.

12 Engineered coatings. As I said, our inspections are  
13 complete. I don't have a good picture of the containment  
14 dome, but if you can picture looking straight up in the  
15 containment, there is an upper and a lower spray ring  
16 header and from the lower header all the way to the peak of  
17 containment is completed. In fact, that second coat has  
18 been evaluated and dispositioned by our quality  
19 organization and we're moving on to the side walls or the  
20 upper dome above the support platform for the polar crane.  
21 So, that work is going well.

22 As well, we've done complete remediation on the  
23 core, both core flood tanks. One is completed, the other  
24 is completely tank removed, it's been prepped and we'll  
25 start painting on that tomorrow.

1       The other thing that Mike talked about, the deep  
2 drain valve work, the reactor coolant pump work is  
3 ongoing.

4       I'm just going to walk through, I think for maybe  
5 the purposes of demonstrating, going through these pictures  
6 and I'll point some items out.

7       Okay, we talk a lot about this emergency sump. This  
8 is a pit right here. And under design basis accident,  
9 you're flowing water into the containment building. And it  
10 fills up from under vessel, and all of the water then, from  
11 this elevation right here, which is actually the 565 foot  
12 elevation of containment; it floods up about 18 inches  
13 above that. That's under design basis, the amount of  
14 water, about a half million gallons or so that go into  
15 containment.

16       This was covered with a screen, kind of a chicken  
17 wire affair, if you will, that was not very substantial and  
18 only forwarded us about 50 square feet of screenage. Why  
19 that's important is that this water as it fills up then  
20 comes through these two valves. They're what's called  
21 vortex breakers, cruciform breakers, that allow  
22 antivortexing of water that's going back into the cooling  
23 system for redistribution back into containment.

24       This area was covered over. That has been  
25 completely removed. This is a stainless steel backing

1 plate. There are structural beams. In fact, I walked this  
2 down yesterday. Two of those beams that Mike is talking  
3 about have been installed. Quite a substantial  
4 configuration here.

5 This area, it will be called the top head. Now  
6 we're looking at a kind of 45 degree angle here, so this  
7 top hat area has about three hundred square feet area of  
8 screen that will allow at 18 inches above that elevation,  
9 that will allow water to flow into that area and be  
10 redistributed.

11 Now, on the far side of this sump is a cutout area.  
12 We've started that, that cutout now. It's about 18 inches  
13 wide, about 30 inches long, and that will allow some  
14 extension pipes, which are drilled pipes to go down under  
15 the vessel, and we'll see another conceptual design. But  
16 actually, when I was walking it down yesterday, one of the  
17 pipe sections had been mocked up with a piece of  
18 insulation, so the guys could actually figure out, will it  
19 fit in there properly. That will add another several  
20 hundred, about up to a total of 1200 square feet of  
21 screen.

22 So, you maybe can't get a lot of picture. These  
23 covers here, that's plastic. It's a foreign material  
24 exclusion cover, so we don't want to get any grit or debris  
25 in this pipe. So, they're covered over.

1           You see a chainfall here for lowering and raising  
2 equipment into that sump.

3           MR. SCHRAUDER:       Randy, I walked it  
4 down this morning and they've got four beams done.

5           MR. FAST:            Oh. So, we got  
6 two beams done since yesterday. Excellent. Thank you,  
7 Bob.

8           Okay. This is the decay heat valve pit. Now, it's  
9 very difficult to get the concept here, but in this  
10 recirculation mode, there are two valves here; Decay Heat  
11 11 and Decay Heat 12. And they will redistribute water,  
12 so these have to be able to be open after a design basis  
13 event.

14          This pit or sump is 19 feet long, 7 feet deep and  
15 about 7 feet wide. So, the walls of this sump will be  
16 lined with stainless steel and sealed to allow proper  
17 environmental controls after a design basis accident. So,  
18 that's what Mike was briefing us on a little bit earlier.

19          This is the fan blades for containment air coolers.  
20 Now, containment air coolers are basically like an air  
21 conditioner for your house in that it redistributes air to  
22 ensure proper environmental controls. In a design basis  
23 accident, we recirculate air for making sure that the  
24 temperature and the pressure in containment is minimized.  
25 So, this is one of the fan blades.

1 I'm trying to give you a concept of how, they're  
2 about, I would say, 8 feet in diameter. So, these are  
3 pretty significant.

4 These, this is the structural platform for the  
5 cooling coils. You can see just, kind of see, you don't  
6 get the whole piece of it. This would be one, like a  
7 radiator from your car, so that's one cooling coil. There  
8 is one, two, three, four sides of the box, so a total of  
9 twelve.

10 Coming down and distributing service water, which is  
11 the cooling medium for the containment air coolers are the  
12 inlet and outlet piping. That's what we have redesigned  
13 and we'll be reinstalling this stainless steel improved to  
14 ensure proper flow distribution through the containment air  
15 coolers. This is at 585 foot elevation. This spans  
16 basically from the 585 down to the 565 foot elevation.

17 Next slide. This is just looking up into the fan.  
18 So, we're down at 565 foot and you're looking up into the  
19 fan. So, air is distributed from containment at 585 feet  
20 through the cooling coil, down through the fan, down into  
21 an outlet plenum and then back and ~~redescribed~~ redistributed back  
22 inside of the D rings where the steam generators are located.

23 Not a lot to see here, but we're using a sponge  
24 blast process to remove paint from equipment in  
25 containment. This happens to be core flood tank number

1 one. It's tinted. We use a sponge blast media. It's  
2 pretty nonintrusive. It does remove paint. It preps the  
3 surface, and we have pictures of what it looks like when  
4 we're done.

5 There is the tank painted bright white and  
6 completely remediated. This is an engineered coating.  
7 Now, why do I use the term, engineered coating? It's  
8 because in reality this will sustain under design basis  
9 accident, so it's an approved long term, won't remove from  
10 jet steam impingement or any conditions that would exist  
11 post-accident.

12 MR. MYERS: Would it be fair  
13 to say from a coating standpoint, we understand our  
14 coatings better than at any plant you worked at now?

15 MR. FAST: We know a lot  
16 about paint. We've certainly, we've partnered with the  
17 industry best and brightest and I feel good about the  
18 condition that we're leaving the condition in.

19 Okay. With that, I'm going to turn it over to Jim  
20 Powers.

21 MS. LIPA: I did have a  
22 question for you, Randy.

23 MR. FAST: Yes.

24 MS. LIPA: Several meetings  
25 back, we talked about the coatings on the conduits. Has

1 that issue been resolved?

2 MR. FAST: The coatings on  
3 the conduit is unqualified. And let me go into a little  
4 detail on that. When the plant was originally built, one  
5 of the things that was done, you have galvanized, which is  
6 a normal coatings process, on the conduit, but somehow we  
7 elected to go back and paint it. And, that paint is not  
8 qualified. So under design basis, some of that paint will  
9 be removed.

10 Some of what we're doing with the emergency sump  
11 screenage will allow for some of that paint, as it's  
12 removed, will be trapped by that screen. So, we'll have  
13 sufficient margin that right now, based on our engineering  
14 analysis, we can have some coatings, unqualified coatings,  
15 and still maintain margin for the sump.

16 So, the target areas we had was containment dome,  
17 the core flood tanks, service water piping, and we do have  
18 some other selected areas. We do have an initiative where  
19 our Operations staff is taking a leadership role in  
20 removing some of the coatings using other processes; not  
21 sponge blasting, but just to remove some of those  
22 unqualified coatings inside the D rings. But not all of it  
23 will be remediated.

24 MS. LIPA: Okay. I think  
25 that this is probably a good time for a break. I know



1 you're all ready, Jim, but we'll take a ten minute break  
2 unless you had any questions.

3 MR. GROBE: I just wanted to  
4 make sure I was clear on this. So, it's your intention to  
5 not removed the unqualified coatings from the conduit based  
6 on the design margin sump?

7 MR. POWERS: Not entirely,  
8 Jack. That's correct. I'll talk a bit about the sump  
9 after the break, but it adds a good deal of margin and  
10 we're factoring in whatever unqualified coatings remain in  
11 containment will be factored into the design basis of the  
12 sump, and in the last meeting we discussed making sure the  
13 license basis reflects that as well.

14 MR. MYERS: Let me answer  
15 that question. I met with a coating engineer last week,  
16 and our intention, we're going to buy some, we're going to  
17 try to sponge blast the stuff. We're going to buy some  
18 stuff, I hate to say like you see on TV, where you put it  
19 on and it takes the paint off.

20 The operators are going to do that. We're going to  
21 get as much of that coating off that conduit as we can  
22 before we start up. That will give us excessive margin.  
23 From a design standpoint, it's not a problem, but it just  
24 doesn't do anything but gain margin, so we're going to  
25 remove as much of it as we can. Okay?

1 MR. DEAN: Let me ask, Jim,  
2 are you going to get in a discussion of, you know, there  
3 has been operability concerns about the containment air  
4 coolers and the coatings; is that something you will have  
5 an opportunity to discuss?

6 MR. POWERS: Sure, I can give  
7 you an update on that. We're not entirely finished with  
8 that, but I can give you an in-process update.

9 MR. MYERS: Now we have eight  
10 minutes?

11 MS. LIPA: Okay, let's start  
12 our ten minutes now. It's 3:23, be back at 3:33. Thank  
13 you.

14 (Off the record.)

15 MS. LIPA: Okay, go ahead.

16 MR. POWERS: Okay. There is  
17 two things I would like to update us on this afternoon;  
18 one is the status of the System Health Assurance Building  
19 Block and the other is an update on the NRC public meetings  
20 we had at headquarters in Rockville on November 26th, both  
21 about the emergency containment sump and the undervessel  
22 incore nozzles.

23 The first issue I want to touch on is Containment  
24 Emergency Sump. You heard quite a bit on it today by Mike  
25 and Randy. This gives another perspective of the sump and

1 where it's located in the containment, and what we're going  
2 to do to significantly expand our sump.

3 The normal sump, as shown up in the upper righthand  
4 corner of the picture, there is a sump access area. Up in  
5 that corner is where the existing sump pit is that Randy  
6 pointed out in the photo graph. That's where the  
7 construction is ongoing.

8 Now we're go work from that sump and we're going  
9 to go down the stairwell. You can see there is a stairwell  
10 tunnel that leads down to under the reactor vessel, and you  
11 can see the bottom of the reactor vessel there on the left  
12 hand portion of this three-dimensional figure.

13 Down along that stairwell is where the incore nozzle  
14 guide tubes run. And they run down there. There is 52 of  
15 them; very small diameter steel tubes that run down through  
16 the tunnel, along the side of it and up into the bottom of  
17 the reactor vessel. And we'll see those in more detail  
18 just following this.

19 But there is room down there that we can use to  
20 expand our containment sump strainer screen. And you can  
21 see the lower strainer pointed out in the, in the picture  
22 here as it runs down the stairwell.

23 Right now, we have 50 squares feet of screen in the  
24 original design. That was removed. And we're moving  
25 towards expanding that up to 1200 square feet of a

1 perforated plate strainer structure. And most of what you  
2 see here in terms of the strainer itself, all the piping  
3 and manifold boxing that's shown will be perforated, so it  
4 all contributes to straining out any sort of debris that  
5 may be generated and providing plenty of flow to the  
6 emergency core cooling system suction.

7       So, we're going to place it as shown here. We  
8 believe this is a model for the industry. And, that's what  
9 we presented to the participants at the NRC. The desired  
10 outcome of that meeting was to solicit any comments or  
11 questions from the Nuclear Regulatory Commission staff,  
12 the Technical Reviewer staff. And they were very curious  
13 about this development. We intend to resolve the generic  
14 safety issue 191, as it's referred to in the industry,  
15 relative to containment emergency sump functionality.

16       It's an issue that's the industry has been grappling  
17 with over several of the last years. It's been resolved at  
18 the BWR's and we resolved it pretty effectively over at the  
19 Perry Plant several years ago. And we brought many of the  
20 same people that participated in that resolution to bear on  
21 this resolution at Davis-Besse Plant.

22       So, we look at this as a model for the industry.  
23 And our intent is to provide a demonstration for some of  
24 our peer utilities to come and see how to effectively  
25 resolve this issue.

1           In the next slide, we show the reactor vessel bottom  
2 nozzles. On the left you can see a photograph of the  
3 bottom head of the vessel and where I talk about the incore  
4 guide tubes leading up into the bottom of the vessel. Here  
5 we can see them coming up into the bottom. There is a  
6 metallic insulation layer that's been removed, so that we  
7 can see them.

8           During normal plant operation, the reactor is  
9 enclosed in metallic ~~installation~~ insulation, as you can see on the  
10 righthand depiction here, that keeps the heat. The reactor  
11 vessel is 500 degrees in temperature when we are in full  
12 power operation. And to keep the concrete around it cool  
13 and minimize the heat loads in containment, it's all  
14 encapsulated.

15          We stripped off all that insulation as part of our  
16 discovery proceedings in containment to do a full  
17 inspection of the bottom head. We've conducted what we  
18 believe is the most thorough bare metal inspection of the  
19 bottom reactor head that's been done to-date in the  
20 industry. And we inspected thoroughly with a crawler  
21 remote robot, so we could look very closely and not expose  
22 our staff to undue radiation. And we went and we cleaned  
23 very thoroughly the head.

24          There you can see its post clean state. And once we  
25 go up to do our pressure test, pressure and temperature

1 test, at full pressure and temperature for 7 days and come  
2 back down, we'll be able to go in there, and if there is  
3 any indication of leakage, it will show up by white Boron  
4 residuals.

5 And, our plan is to do that test. Go in and examine  
6 to see if there is any leakage. We don't believe that  
7 there is any, based on all the work that's been done  
8 to-date. But if there is, we have a repair concept that,  
9 that is ready to go; repair that's been done on pressurizer  
10 vessels very similar to these type of penetrations. So,  
11 that's in the wings and ready to go should we need it.

12 One of the other firsts that we're doing, as far as  
13 this project, first U.S. installation of what we call our  
14 Flus Monitoring System. This is a moisture monitoring  
15 system that was developed in Europe and used in reactor  
16 systems over there to monitor for any sort of leakage.  
17 It's picked up as a change of moisture content in the air.

18 And we'll install the small sampling tubes within  
19 the metallic insulation package. And you can see that,  
20 it's shown in the righthand side here in this figure.  
21 Small tubes laid out in insulation. They will be  
22 continuously sampling the air to determine if there is any  
23 change in moisture. If there is, we'll then take the  
24 actions that will be prescribed in the operating procedures  
25 for this monitoring system.

1           So, this is another first that we'll be installing.  
2   When we spoke to you last month at the public meeting, we  
3   weren't sure at that time whether we would be able to get  
4   this installed by the end of this outage. Now, based on  
5   the work we've done with Framatone, our supplier, our  
6   reactor supplier and the supplier of this monitoring  
7   system, we believe we can get this installed prior to the  
8   end of this outage. And, we're working towards that goal.

9           MR. GROBE:           Jim, before you  
10   go to your next slide. I wanted to make sure I was  
11   speaking into the microphone, and for a moment I forgot my  
12   question. It will come back.

13          MR. POWERS:          I'm sure it's a  
14   good one.

15          MR. GROBE:          But everybody can  
16   hear that I forgot my question.

17          MR. POWERS:          I'll move on to  
18   System Health, and I'm sure it will come to you.

19          MS. LIPA:            I did have a  
20   question before you go on, Jim. When we had the meeting on  
21   November 26th, I think we talked at that meeting about some  
22   tape that was on some of these lower nozzles. What did you  
23   find about those?

24          MR. POWERS:          What we found,  
25   there was a few more pieces of evidence we wanted to take

1 to see if they could help us characterize the Boron stains  
2 that were found at the bottom of the vessel. There were a  
3 couple pieces of tape that were remaining, apparently from  
4 original construction completion. And the tape was  
5 enclosed in the portion of tubing that was hidden by the  
6 insulation panels. And those are typically not removed,  
7 those insulation panels. So, it really hadn't been found  
8 until we did this complete removal and thorough cleaning  
9 and inspection.

10 So, we took the tape samples off and sent them to  
11 the lab. We also took some scrapings of the paint that was  
12 on the side of the vessel, and sent that off to see if that  
13 would help us characterize the results of the lab analysis,  
14 the chemical analysis of the Boron samples we had taken.

15 And, in fact, they did the analysis. It didn't  
16 really help us. It didn't clarify anything further,  
17 Christine, in terms of knowing where the Boron, you know  
18 confidently stating where the Boron originated from.

19 We believe it came from above, from washdowns of the  
20 Boron that was on the head, and also from leakage through  
21 our temporary refueling cavity seal.

22 One of the reasons Lew talks about so emphatically  
23 enthusiastically about putting this cavity seal in, is that  
24 it's going to prevent leakage and prevent these types of  
25 questions from occurring. And many of the stains we saw on



1 the side of the vessel were Boron deposits likely from that  
2 type of leakage source.

3 The cavity seal, for your information, will go up at  
4 the top of the sketch, where you see the concrete; there is  
5 a gap between the concrete and reactor vessel at the top  
6 level there. That's the flange where the head comes off  
7 the vessel during refueling. And, then you take the head  
8 of the vessel off, then you put a seal plate around that  
9 gap. That seals the cavity, the reactor annulus cavity.  
10 Then you can flood up with water in a refueling canal and  
11 pull your fuel out of the vessel and handle it for  
12 refueling.

13 So, that's an important function; and once we put in  
14 a permanent seal, then we'll have a high integrity water  
15 tight barrier there, and we don't expect to have any more  
16 leakage questions.

17 MR. GROBE: Jim, were there  
18 any chlorides concerns that arose from discovery of this  
19 tape?

20 MR. POWERS: No, there wasn't,  
21 none that was reported, Jack.

22 MR. GROBE: Interesting.

23 I remembered my question earlier. I think you've  
24 answered it to some extent, but you indicated a belief that  
25 the bottom head penetrations are not cracked and not

1 leaking. Could you go into some detail on the basis for  
2 that belief?

3 MR. POWERS: Well, the basis  
4 really is that if you look at the flow trails, as we refer  
5 to them, that came down the side of the vessel, there was  
6 two different flow trails; one was a reddish colored, rust  
7 colored flow trail on the one side of the vessel and the  
8 other one was a white colored flow trail.

9 The reddish colored flow trail corresponded to a  
10 location where the deconers, technical deconers staff at  
11 the station had reported that when they were cleaning the  
12 head, that some of the, some of the deposit had washed down  
13 the side of the vessel, over the flange and down the side  
14 of the vessel before they put in their cavity seal as part  
15 of the initial stages of refueling when they were cleaning  
16 the bolts to undo the reactor head bolts.

17 And the other trail came down from what looks like  
18 on the other side of the vessel what would potentially  
19 either be from the reactor cavity seal leakage, and we also  
20 found as part of our inspections of this outage that there  
21 is a couple of pressure detection lines that are associated  
22 with the head and they're used to detect the integrity of O  
23 ring seals. And we found that those had been cracked at  
24 some time in the past.

25 So, when the, when the refueling canal is filled

1 with water, they may have been drippings and some leakage  
2 as well. And so, we believe that there is evidence that  
3 these flow trails came from those sources.

4 Now, the chemical analysis that we did showed higher  
5 levels of lithium and Boron in some of the nozzle  
6 locations, which is interesting there is a higher  
7 concentration of Boron and lithium, but the interesting  
8 thing was that there is no constituents, activation product  
9 constituents from reactor coolant that you would expect to  
10 see if we had an actual leak from inside the vessel.

11 So, there was some contradictory information there.  
12 Although it was, it was interesting that some of these  
13 nozzles at higher levels of Boron, it didn't show  
14 activation products that we would have expected had it been  
15 reactor coolant leakage.

16 And, when you look at the size of the samples that  
17 were able to be taken, how they were taken, you know, the  
18 amount of material that the chemists had to work with for  
19 their analysis and how it may have been, it may have been  
20 affected by, for example, the paint that was on the side of  
21 the vessel; that's one of the reasons we sampled it;  
22 Scotch Bright pads that were used to remove, scrape off the  
23 sample, the very small amounts we were able to obtain, led  
24 to questions on whether, you know, the quality of the  
25 samples, the conclusiveness of the chemical analysis.

1           MR. GROBE:           Have there been  
2 any observed bottom head nozzle cracking in other plants in  
3 the United States or in Europe?

4           MR. POWERS:           No, not so far.  
5 The French plants have surveilled, I think it's 17 plants  
6 have been surveilled since 1993. And, although their  
7 bottom nozzles are a bit different than ours, they still  
8 have the similar type of pressure boundary weld associated  
9 with them. And they still have temperatures in the range  
10 of the temperatures that we have.

11           These nozzles have been believed for a long time to  
12 be less susceptible to cracking than many other nozzles in  
13 higher temperature portions of the Reactor Coolant System.  
14 The French have never seen any cracks. Domestic plants  
15 have also done some inspections in recent outages looking  
16 for any evidence of leakage from these nozzles and have  
17 reported none observed.

18           So, no, there is no evidence thus far of cracked  
19 nozzles.

20           MR. GROBE:           One more question  
21 before we get away from the bottom head. Did you observe  
22 any apparent contaminants on penetrations that weren't part  
23 of the flow path that appeared to be coming down the side  
24 of the vessel?

25           MR. POWERS:           I believe every

1 one of the nozzles that we sampled was, was engaged or  
2 involved in one of the flow paths. And we picked the  
3 samples, the nozzles, there were twelve of them, based on,  
4 largely on the appearance and, you know, tracking attention  
5 of an area that should be sampled to see if there was any  
6 conclusive evidence that would be available from a chemical  
7 sample.

8 And, Bob, was that the case?

9 MR. SCHRAUDER: Jack, I don't  
10 have a microphone, but there were some nozzles that had  
11 deposits on them that were not evidently in a flow path.

12 MR. GROBE: Okay.

13 MR. SCHRAUDER: We did take  
14 samples from those also.

15 MR. GROBE: Okay,  
16 interesting.

17 MR. POWERS: Thanks, Bob.

18 Lew was asking me to talk about susceptibility.  
19 This whole issues revolves around what's called primary  
20 water stress corrosion cracking. That's what started the  
21 issue on the head. That's been found in the industry that  
22 the alloy was referred to as Alloy 600 metal that's used  
23 for these nozzles is susceptible to cracking, given the  
24 right set of circumstances, and it's related to chemistry  
25 and stresses that are in the material, and temperature is

1 one of the major factors.

2 And so, that's why we look pretty carefully when we  
3 talk about susceptibility ranking and go through the  
4 reactor system. The bottom head operates at a lower  
5 temperature than the top of the reactor. The bottom head  
6 operates at about 566 degrees; and the top head at our  
7 plant operates about 604 degrees, for example.

8 The pressurizer also operates at a relatively high  
9 temperature. And we took some, did some NDE on one of the  
10 lines coming out of our pressurizer, a vent line, to see  
11 whether it had showed any signs of potential cracking, and  
12 it did not, as a matter of fact.

13 And, those are some of the reasons why we believe  
14 these lower heads penetrations are not currently affected.

15 MR. GROBE: Okay, thank you.

16 MR. POWERS: Okay. Let me go  
17 on to the System Health Assurance Plan update.

18 We completed our discovery for the initial scope of  
19 the review of our systems. We've been talking about this  
20 in past public meetings. This morning in my office, I had  
21 all of the reports completed by the engineers, reviewed by  
22 our various reviewers, management reviewers, oversight  
23 reviewers. And, we're prepared to be delivered to Lew  
24 Myers for his sign-out as completion for inspection, and  
25 they're all in his office now for his review and final

1 sign-out.

2 This really constitutes a milestone for us,  
3 although, all along we've been identifying issues as we  
4 found them within our Corrective Action Program. Finishing  
5 these reports really turns a corner for us in terms of  
6 completing a major portion of discovery looking through the  
7 health of our systems.

8 What we found as a result of all the reviews that  
9 have been done is there is a number of issues, particularly  
10 in the design calculation area, that we're going to be  
11 following up on. Corrective action documents have been  
12 written, based on potential issues. We need to determine  
13 the validity of the issues, the questions that are asked.

14 And we know that there are some good issues here for  
15 us to tackle. I have listed a few of them out here that  
16 we're currently working on. Instrument tolerances in  
17 calculations, for example. We have instrument set point  
18 drift and calibration accuracies, for example.  
19 Instrumentation accuracy, built into calculations that form  
20 the bases for our tech spec trip set point, set points.

21 But for other set points, we have not incorporated  
22 this level of detail similar to other older plants the  
23 vintage of Davis-Besse. And, we're evaluating that now in  
24 terms of what, the significance of that to our other  
25 systems, and that's ongoing.

1       The emergency diesel generator loading sequence is  
2 being studied. We need to prepare a detailed calculation  
3 on the diesel generator performance as it's loaded with  
4 step loads. You know, in a case where we lose our offsite  
5 power from the gridlines, our emergency diesel generators  
6 automatically start and automatically load in the plant to  
7 drive our safety systems.

8       Those safety systems have some rather large motors,  
9 rather large loads. And, how those sequence onto the  
10 diesel generator is something the engineers study to make  
11 sure that the frequency output of the diesel generator is  
12 maintained during that loading transient and that the  
13 equipment functions acceptably through it.

14       This type of analysis has been done at many other  
15 nuclear plants with engines just like ours. So, the  
16 engineers now are comparing how our plant compares  
17 design-wise to them. It's a very common diesel generator  
18 that's in use. And the diesels have been tested a number  
19 of times and the analysis has been done at many other  
20 sites, so we're following through to prepare that analysis  
21 for the Davis-Besse site.

22       Service water temperature, we talked about that a  
23 lot before. There had been work in the past to address the  
24 rising lake temperature in this region, and their affect on  
25 the plant. As part of that work, we lost some margin on



1 our systems. As the temperature goes up from the lake, the  
2 heat exchangers don't cool quite as well. So, in  
3 addressing that issue, we did not address it in a manner  
4 that we would preserve margins, and that's what we're going  
5 to go about now. We're doing a lot of reanalysis of the  
6 capability of the system with some more recent tools,  
7 analytical tools, to demonstrate we have margins we need  
8 for safe operation.

9 The bullet here I have talks about high pressure  
10 injection minimum flow, was an issue that came up as part  
11 of the NRC inspection portion of the external oversight of  
12 our system reviews. This issue concerns very, very small  
13 leak in the reactor system and high pressure injection  
14 system responding to it and injecting. In the very long  
15 term, about 23 hours after that type of situation would  
16 develop.

17 If we would empty out our reserve water tank, and  
18 switched over our suction to the emergency sump at that  
19 point, there is a prescribed action to close the min flow  
20 valve, the minimum flow valve that goes back to our reserve  
21 water tank. And, there is a question on the table in terms  
22 of whether the high pressure injection pump is protected  
23 adequately for minimum flow.

24 And, for those of you that aren't pump engineers,  
25 the pumps need to have a certain amount of small flow going

1 through them, so that the pump doesn't vibrate and so the  
2 water doesn't ultimately overheat. Just from the energy of  
3 the pump turning will heat the water to where it boils and  
4 forms voids and that can damage a pump.

5 So, in the industry we try to ensure the minimum  
6 flow protection is provided. So, that's a comment we  
7 received and we're working on that issue now.

8 Then the last bullet is an issue that came up in our  
9 service water review on heat exchanger code relief  
10 protection. These are relief valves. Normally heat  
11 exchanger vessels designed for the ASME Code are provided  
12 with what's called code thermal overpressure protection.  
13 Particularly, if it's, for example, a fired boiler, where  
14 the pressure increases, just as it would on your stove on a  
15 teapot, there is a way for the steam, the pressure to get  
16 out; there's small relief valves that do that.

17 In this case, our heat exchangers are not fired,  
18 it's not a large source of heat, so there is a question of  
19 whether they need to have code relief protection;  
20 something that many of them haven't had since the original  
21 construction of the plant.

22 So, we're wrestling some issues here that are both  
23 new in the case of service water temperature, for example,  
24 and very old in the case of high pressure injection or heat  
25 exchanger code relief protection.

1           MR. GROBE:           Jim, I just  
2 thought of something on that last issue. Are you  
3 interfacing with the state code pressure injection board on  
4 that last issue?

5           MR POWERS:           Have we  
6 communicated with them? We haven't drawn them into  
7 discussion yet, Jack. We've been looking at the licensing  
8 basis and the code itself, but I think that's, that's a  
9 good point of something we do need to engage them, because  
10 they're very active at the site and they're one of our  
11 additional oversight resource that we can use to bounce  
12 this off of.

13          MS. LIPA:           Jim, where do you  
14 stand in your review of these issues for reportability,  
15 past operability?

16          MR. POWERS:           Well, all the CRs  
17 that go through the process, as I mentioned earlier, are  
18 checked off in terms of whether they involve past  
19 reportability. And there are two of them that you asked me  
20 to talk about; one was the containment air coolers and  
21 emergency sump. We had talked about those before the  
22 break.

23          And the, the containment air coolers, we're in the  
24 process of submitting a voluntary LER reporting the  
25 condition of the containment air coolers that was found in

1 containment subsequent to the Boron effects on them, but  
2 we've looked at the structural capabilities of those  
3 containment air coolers, both the piping to them and the  
4 coils, and the coil supports and the registers and such,  
5 and believe that the structural integrity is good.

6 We have not taken the analysis through all the  
7 thermal capability of them. There was some Boron fouling  
8 of them when we took them apart, dismantled them for  
9 replacement, we found that there was some fouling on the  
10 water side, sludge and so forth in there. And so there is  
11 additional issues we were assessing on the performance of  
12 the CACs. So, we're going to provide an LER reporting of  
13 that situation to you. That's in preparation now.

14 We're also providing a supplement to the report that  
15 we made on the containment emergency sump. We had reported  
16 the potential inoperability of that sump, based on the  
17 qualified coatings in containment, unqualified coatings  
18 that we found.

19 And, also based on an opening that we found in the  
20 screenage of the sump, a relatively small opening, but  
21 bigger than the quarter inch design opening. And we had  
22 reported that to you in a relatively brief abstract last  
23 month, and based on these facts, we're providing an  
24 expanded response that gives much more detail on what we're  
25 doing and what we found.

1 MS. LIPA: What about these  
2 five bullets that you have here; are those still under  
3 review?

4 MR. POWERS: Yes, still under  
5 review. They're potential issues, and as we review them to  
6 determine, to determine the significance of them, then they  
7 will be going through reportability assessment. Christine,  
8 if they're reportable, we'll report them.

9 And so, another point that goes with our, our  
10 completion of the discovery for System Health is that we're  
11 moving into our extended condition reviews. We found some  
12 issues here on the Systems Review. We want to make sure  
13 that the balance of our, of our important risk significant  
14 systems are healthy as well. So, from an extended  
15 condition standpoint, we're moving off as part of our  
16 implementation plan, moving forward into building block to  
17 go through additional systems, and we'll be communicating  
18 that list of systems to you.

19 That's moving forward as well. There is a total of  
20 15 of our important systems that we'll be evaluating to  
21 make sure they don't have similar issues in the design  
22 calculation area, as well as several other topical  
23 engineering design areas. Of those 15, 7 are already done,  
24 so there is 8 additional systems that we're going to be  
25 working on over approximately the next month and a half to

1 determine their safety function capability.

2 MR. GROBE: Jim, before you  
3 go on, you and I had a rather lengthy meeting this morning  
4 discussing these issues. I just want to make sure I  
5 understand a couple of things.

6 You've identified issues regarding calculations as  
7 well as a number of specific technical areas, like high  
8 energy line break analysis, and seismic capability analysis  
9 and several others, where you believe that you don't yet  
10 have the extent of the problem identified. And if I  
11 understand what you just said correctly, you were going to  
12 broaden the scope of your review of the systems to address  
13 some of those issues and further understand what kind of  
14 problems might exist in the plant; and that will take  
15 roughly a month and a half, is that what you said?

16 MR. POWERS: Right. We expect  
17 in the range of approximately six weeks to do the initial  
18 cut through the systems.

19 MR. GROBE: Okay. And, a  
20 number of these deficiencies you've identified, either  
21 you've concluded are operability issues or could be system  
22 operability issues; and these are technical specification  
23 systems that are required to be operable during plant  
24 operation.

25 MR. POWERS: What we're looking

1 at for the starters here, Jack, is the systems that  
2 contribute greater than one percent of risk significance to  
3 our core damage frequency value. And the 15 systems that  
4 we have selected compose 99 percent of the value of our  
5 core damage frequency code.

6 So, from a probabilistic safety assessment  
7 perspective, we have, we've got the vast majority of the  
8 important systems composed in a set of 15 important systems  
9 at the plant. They also compose 98 percent of our large  
10 early release frequency value. So, these are truly systems  
11 that are important to safety at the plant.

12 MR. GROBE: I understand  
13 that. The technical specifications however require all  
14 systems to be operable; and, if you wanted to choose to  
15 modify your technical specifications and remove some of the  
16 specifications for other systems that are less risk  
17 significant, I suppose you could go down that avenue.

18 But we talked about meeting in the regional office  
19 later this month. I think we tentatively set the 23rd, for  
20 you to go through in much more detail the logic path that  
21 you've developed, where you've got some engineering issues  
22 that you've identified that could effect the operability of  
23 the systems, and how you chose the extent of the additional  
24 reviews you're going to be, and how you are justifying the  
25 need to not review all tech spec, technical specification

1 systems.

2       So, this is a very important area, and I'm looking  
3 forward to that dialogue. And, hopefully, by the time we  
4 meet on the 23rd, if that's the final date, I think that's  
5 firming up, you can have a much more clear understanding of  
6 the operability impacts of these design deficiencies, and  
7 we can get into a little more detail on that subject.

8           MR. POWERS:        Okay.

9           MR. MYERS:        Jack, I think it's  
10 fair to say too --

11          MR. GROBE:        You need a  
12 microphone, Lew.

13          MR. MYERS:        I think it's fair  
14 to say, you know, a lot of these issues are just calcs  
15 that 25 years ago we may not have or may not completely  
16 understand, so we don't know that any of them really affect  
17 operability this time. What we wind up doing is generate a  
18 CR on any issues we find as we do these slices and then  
19 doing an operability assessment of each one of those, you  
20 know, as we find the issue; similar to what we do at other  
21 stations.

22        Just because you may not have a calc; when you get  
23 through you may have a calc and find out everything is  
24 okay. So, that's where we're at.

25          MR. GROBE:        Appreciate your



1 comments, Lew. I wanted to make sure it's not, I'm not  
2 being misunderstood.

3 I'm not suggesting that you're required to do  
4 reviews of all of your systems. What's important to me is  
5 to understand which of these engineering deficiencies had a  
6 more safety significant impact on system operation, and if  
7 there are engineering areas where you had a significant  
8 impact on safety, what is your justification for the scope  
9 you have chosen, and making sure that we clearly understand  
10 that the standard that we need to come to, to approach  
11 restart, is a reasonable assurance that the systems are  
12 going to be performing correctly. And I want to start  
13 developing that foundation for an understanding of how you  
14 came to a conclusion that this plan will give you  
15 reasonable assurance, and we need to understand that before  
16 we can make any sort of a recommendation to our management  
17 on going forward.

18 MR. MYERS: I understand  
19 that. Thank you.

20 MR. GROBE: Could we go back  
21 to slide 18 a bit? Actually 17.

22 I think, Mike, this was part of your presentation.  
23 I wanted to get into a little more detail on the approach  
24 to Mode 3; and particularly in the area of system  
25 function. But first, I would like to talk, the third

1 bullet down on this slide has to do with the emergency sump  
2 strainer. What is your expectation for completion of that  
3 modification?

4 MR. POWERS: Mike, go ahead.

5 MR. STEVENS: Okay, the  
6 emergency sump strainer modification was broken into two  
7 pieces. We expect that the top piece will be installed to  
8 support moving fuel. That's what we're working towards.

9 MR. GROBE: Okay. So, I  
10 understand now. So, you're planning on doing the  
11 modification which will increase the top strainer from  
12 approximately 50 square feet, I think you said the number  
13 earlier today was 300 square feet. That part of the  
14 modification will be done, but the bottom section of the  
15 strainer that goes down the stairs and around the corner,  
16 that part of the modification won't be done at this point  
17 in time?

18 MR. STEVENS: That's correct.

19 MR. THOMAS: So, do you stop  
20 doing the bore through the sump walls going down into the  
21 undervessel?

22 MR. STEVENS: No, we haven't.

23 MR. GROBE: Could you go into  
24 a little bit more detail on how you're going to sequence  
25 these things?

1           MR. STEVENS:       I'm not sure I  
2 understand the question. We're going, the tech spec and  
3 requirement for moving fuel is to have the emergency sump.  
4 And we have a safe shutdown procedure that goes through  
5 contingency plans and alternatives for having the flow path  
6 through the, what is storage tank, and then back into the  
7 vessel.

8       We intend to install the top piece. We're not going  
9 to leave the hole there. We have to do something with  
10 that. We're working through those contingencies.

11       Part of what is prohibiting us from moving forward  
12 and finishing it will be the dose rates in the area and  
13 we'll have to sequence that so that we can get in and back  
14 out without getting into lock high rad areas.

15       MR. GROBE:        Let me restate  
16 that to make sure. I think I understand, I think I  
17 understand what you said. You're going to continue with  
18 the modification work for the bottom section of the  
19 strainer, but at the point in time that the plant is ready  
20 to proceed with fuel load, you'll somehow blank off those  
21 strainer sections such that the sump has an integrity.

22       MR. STEVENS:       That's correct.

23       MR. GROBE:        Is there going to  
24 be some sort of post maintenance or modification test that  
25 will be done at that point to ensure the integrity of the

1 sump? It's kind of an undefined situation.

2 MR. STEVENS: That's why we  
3 broke it into two pieces, so we could better define it. We  
4 will do the operability reviews required to partially close  
5 that portion of the modification, and all in accordance  
6 with. Do I understand the question?

7 MR. GROBE: Did that answer  
8 your question, Scott?

9 MR. THOMAS: Yes.

10 MR. GROBE: Okay.

11 MR. MYERS: I think one thing  
12 that is important here, we have our plans right now to stop  
13 somewhere along the way, but what we have to do is, and  
14 blank it out; but what we're going to have to do is we have  
15 a condition report on that. We'll have to do an  
16 engineering evaluation. Once again, the people that  
17 declare operability is our shift supervisors. We all need  
18 to understand that very clearly.

19 So, what we have to do is go over to our shift  
20 supervisors and convince our shift supervisors that this  
21 sump for the conditions we're at, that the straining module  
22 will meet its intended function, you know, and that being  
23 the support system for the sump. The shift supervisors,  
24 shift managers will make that determination.

25 MR. GROBE: Okay, and that's

1 where it should be. I appreciate that.

2 I don't have your valve numbers memorized, but I  
3 think a couple things came together for me as you were  
4 giving your presentation, Jim.

5 This RC 46 and RC 47 drain piping cracking, those  
6 are the valves that are on the lines that come from between  
7 the O rings on the reactor head. Okay. And the crack in  
8 the drain piping is a potential source of material that  
9 might have flowed down the side of the reactor vessel?

10 MR. POWERS: That's right,  
11 because it's down below the cavity seal.

12 MR. GROBE: Okay. Thank you.

13 Could we go to the next slide?

14 MR. MYERS: The answer to that  
15 question was yes, for people who couldn't hear in the  
16 back.

17 MR. GROBE: Right, you need  
18 to use the microphone, Jim.

19 The next slide, on slide 18, you indicate core  
20 reload in mid January. Are some of the systems that you're  
21 going to be reviewing for extended condition design issues,  
22 systems that are required to be operable for core reload?

23 MR. MYERS: Yes.

24 MR. GROBE: Okay. So, it  
25 seems like there is kind of a convergence of activities

1 here. About six weeks of design reviews, which will  
2 discover additional problems likely, and so, that's a  
3 tentative date based on knowledge of what deficiencies  
4 might be identified in these continuing design reviews?

5 MR. MYERS: I don't want to  
6 peek for our operators, but what we know right now, if you  
7 go through the operational check sheets, we have a  
8 requirement that containment sump have some degree of  
9 operability to, to support core reload. That's not a tech  
10 spec out, that's an administrative item we have in our  
11 house.

12 We will look at that item based on having the  
13 containment, the permanent cavity seal in place and make a  
14 determination what we need to have in effect for core  
15 reload. Then the next step is, you know, putting the head  
16 on, going to Mode 5 and then Mode 4, and so on. And each  
17 one of those plateaus requires different conditions.

18 Here for the ECCS system to be a systems, that's  
19 where you get into the core of mitigation system, the ECCS  
20 systems, Emergency Core Cooling Systems; that's usually in  
21 Mode 4 runs with them, and I think that's 280 degrees  
22 here.

23 So, at that point, you know, we'll have to have a  
24 large portion of our systems operable. And, at that point,  
25 right now we're looking at mid February there. So, it's

1 not as convergent as one might think.

2 MR. GROBE: Okay, I see. So,  
3 Mode 3, you're looking at, and that's the next slide, slide  
4 19, your target there is mid February?

5 MR. MYERS: That's correct.

6 MR. GROBE: Okay. And then  
7 after, at the time you get to Mode 3 is when you're going  
8 to be doing that reactor cooling system normal operating  
9 temperature and pressure test.

10 MR. MYERS: That's right.

11 MR. GROBE: I understand.  
12 Okay. I appreciate you bearing with me. A number of these  
13 issues came together as you went through that  
14 presentation.

15 I apologize. There is one more thing. Bob  
16 Schrauder, you indicated that you had some contaminants on  
17 bottom head penetrations that were not associated clearly  
18 or easily visually associated with leakage coming down the  
19 side of the vessel.

20 Did you have any digital photographs that were  
21 generated of those penetrations prior to the cleaning? I  
22 was down there, but it's all been cleaned up.

23 MR. SCHRAUDER: I would have to go  
24 back and check the database of the pictures we have. Some  
25 pictures --

1           MR. GROBE:           Yeah, if you have  
2 digital pictures of those penetrations, I would be  
3 interested in seeing them if you could email them to me.

4           MR. SCHRAUDER:       Okay.

5           MR. POWERS:           Okay, next slide.

6           Just wanted to briefly talk about one of the  
7 engineering focuses then on restart. Mike talked about  
8 Mode 6 at the time we took out this number of our CRs, we  
9 were at 189 Mode 6 condition reports that provide  
10 restraints going to Mode 6. So, there are issues that need  
11 to be dealt with. Those are actively being worked on.

12          We're prioritizing work at the site by mode change.  
13 So, Mode 6 being the first one. We're focusing a lot of  
14 attention on bearing down. And then the ongoing  
15 modifications that support fuel reload and containment  
16 health. I listed a few of them here. Although, there is a  
17 lot of work going on to improve the plant, as I'm sure a  
18 lot of the people there would tell you all.

19          So, that's it for the engineering update. Unless  
20 there is any questions, I'll turn it over to Neil  
21 Morrison.

22

23          MR. MORRISON:       Thanks a lot.

24          For those of you who don't know me, my name is Neil  
25 Morrison and I'm the Owner of the Program Compliance Plan



1 Building Block. As Lew mentioned, I am on loan from Beaver  
2 Valley.

3 Today I'm going to provide you a brief update on the  
4 current status of my building block and also some future  
5 actions that FENOC is going to take in the area of program  
6 reviews.

7 As many of you -- well, as the board members may  
8 know that the Program Compliance Plan Building Block  
9 consists of two parts. The first part, which we would  
10 characterize as a Phase 1 Program Review, is for programs  
11 that were not associated with the degradation of the  
12 reactor vessel head. And we do a program review that is  
13 similar to a coached self-assessment that gets some  
14 independent oversight actions on the back end of it.

15 The second review that we do is a Systematic  
16 Detailed Review; and that's primarily focused on programs  
17 that were associated in some manner with the degradation of  
18 the reactor vessel head or programs that management has  
19 asked to have a detailed review on.

20 Currently, we have completed 65 Phase 1 Program  
21 Reviews, which is our intended target population. Of those  
22 65, 19 are complete, paperwork is all signed off,  
23 approved. And the remaining 46, we're working through to  
24 close those out.

25 For Phase 2, which is our Systematic Detailed

1 Review, we had six programs that we intended to complete  
2 that are on the Restart Checklist. Four of those six are  
3 complete. You'll see them listed there; the Boric Acid  
4 Corrosion Control Program, the Corrective Action Program,  
5 the In-Service Inspection Program and the Operating  
6 Experience Program.

7 In addition to that, we had a pilot that we had  
8 performed prior to starting this activity, and it was  
9 Probabilistic Safety Assessment Program. And that report  
10 is in draft status. We will complete that action in  
11 January.

12 MR. HOPKINS: When you say  
13 complete; what does that really mean? I'm interested in  
14 how many actions you may still have coming out of it or  
15 what?

16 MR. MORRISON: My Building Block  
17 is a primary focus type of building block. We will go in  
18 and evaluate a program and document concerns or issues that  
19 we may have in a program using a Corrective Action Process;  
20 and out of that, then the program owners take those  
21 Condition Reports and resolve those issues and they develop  
22 an Implementation Action Plan to pull those issues together  
23 and manage them and resolve them and put the programs in a  
24 condition to support the restart of the facility.

25 MR. HOPKINS: Okay.

1           MR. DEAN:           Neil, do you  
2 identify any of those actions as, in a manner of mode  
3 restraints as we've heard discussed with other?

4           MR. MORRISON:       My building block  
5 does not do that. We provided initial characterization  
6 whether we think the issue might be considered as a  
7 restart, but then the Restart Station Review Board would  
8 take that condition report and confirm that evaluation one  
9 way or another.

10          Those issues that may affect operability of a  
11 component would get run through the control room and they  
12 would assign a mode restraint if appropriate.

13          MR. DEAN:           You talking  
14 restart, you're talking overall recovery of the plant, not  
15 just the core?

16          MR. MORRISON:       That's correct.

17          So, currently we have two additional programs that  
18 are under review right now at this time and they're near  
19 completion. We expect to complete them before Christmas.  
20 That's the Modification Program and Radiation Protection  
21 Program.

22          In addition to that, under my Building Block, I know  
23 this is one that I think the NRC has a lot of interest in,  
24 we are developing a Reactor Coolant System Integrated  
25 Leakage Program, which does include unidentified leakage.

1 And, while the program is under development, really aren't  
2 in a position at this time to go into great detail. I can  
3 give you a couple of features we have under consideration  
4 for that program.

5 One of the unique things that we're looking at doing  
6 is, when a plant heats up into Mode 3, which is normal  
7 operating temperature and pressure, but no nuclear heat, as  
8 mentioned earlier, we intend to do a baseline plant  
9 leakage. What's good about that is, you'll do this leakage  
10 calculation to determine what your baseline value is. In  
11 conjunction with that, you do a VT-2 walkdown, which is a  
12 normal activity coming out of refueling, which would  
13 confirm that you have no pressure boundary leakage.

14 Another thing we're looking at doing later on this,  
15 in 2003, we're going to heating the plant up and we'll be  
16 sitting in normal operating temperature and pressure for  
17 approximately 7 days. And at that time, this program that  
18 we have under development, we're going to pilot that.  
19 We're going to do some calculations at that time, and we're  
20 going to instill through some normal piping systems a known  
21 inventory loss in the cooling system and see how sensitive  
22 our methodology is to that, looking at small numbers. Make  
23 sure that we will be able to identify leakage at low  
24 numbers.

25 MS. LIPA: Question that I

1 have is, I guess I thought that one of Phase 2 Programs

2 Reviews was the QA Program. Did that change?

3 MR. MORRISON: The QA Program,

4 there is a detailed review going on and that's not really

5 being managed under my Building Block. That's being done

6 independent of my Building Block. And that is in fact

7 ongoing right now.

8 MS. LIPA: What Building

9 Block is that associated with?

10 MR. MORRISON: I don't think it's

11 associated with any specific Building Block. It's being

12 done through QA themselves.

13 MR. MYERS: Management/Human

14 Performance.

15 MR. MORRISON: I stand

16 corrected.

17 MS. LIPA: Trying to keep it

18 all straight. Thank you.

19 MR. GROBE: Neil, before you

20 go on, Jim had talked earlier about the installation of the

21 Flus Monitoring System. And, I have two questions. One

22 concerns experience on installation testing, preoperational

23 testing of such a system, and calibration of such a system,

24 and whether you're going to use this time frame, whether

25 this Flus System will be in operation at the time of this

1 first NOP/NOT test, such that you can baseline that and  
2 perform the preoperational testing at that time?

3 MR. POWERS: Our thoughts on  
4 that, Jack, is that we know that the insulation package has  
5 to be tight in order for that Flus Monitor to work well.  
6 And, our initial concept is, we would want to provide some  
7 sort of test to see if we could detect very small amounts  
8 of moisture with the Flus, but it's not linked at this  
9 point into the Integrated Leak Testing Program tests that  
10 Neil is describing here, which would be more, the Flus is  
11 very, it's localized to the lower reactor vessel area,  
12 where what Neil is talking about, we're really surveilling  
13 the entire Reactor Coolant System and we need to be able to  
14 detect leakage in steam generator cubicles, for example,  
15 and pressurized cubicles, beyond just the bottom head.

16 MR. GROBE: Is the Flus  
17 System going to be part of the RCS Integrated Leakage  
18 Program?

19 MR. MORRISON: Yes, it will be.

20 MR. GROBE: Okay.

21 MR. MORRISON: Overall, the  
22 Integrated Leakage Program, we are trying, we are in the  
23 process of putting together, we want it to be a model for  
24 the industry, something that they can take, you know, after  
25 we got it in place, and pattern their own programs after

1 it.

2 MR. GROBE: One other  
3 question is, is there, where these Flus systems are used, I  
4 have no experience with these systems at all; are you able  
5 to use those on top head installations also?

6 MR. MORRISON: Yes, we can use  
7 them on top heads also.

8 MR. GROBE: But you're not  
9 planning on doing that at this time?

10 MR. POWERS: Not at this time,  
11 since we got essentially an unused new head installed,  
12 we're not planning that at this time, Jack, we're mostly  
13 focused at the bottom head region.

14 MR. MORRISON: The last thing I  
15 wanted to talk about this afternoon has to do with Program  
16 Reviews. I'm sorry.

17 MR. GROBE: One more question,  
18 Neil, I apologize.

19 MR. MORRISON: That's quite all  
20 right.

21 MR. GROBE: I'm very  
22 interested in the section of your RCS Leakage Procedure  
23 that deals with VT-2 Testing and Inspections. I've seen  
24 quite a variety over the years of approaches to those types  
25 of inspections; some are comprehensive inspections, some

1 are less effective. Is there going to be guidance in this  
2 leakage procedure on VT-2 Inspection Procedures, or is that  
3 in your ISI Inspection Procedures?

4 MR. MORRISON: That's an  
5 interface with the ISI Program, but we will be looking at  
6 that interface pretty hard and make sure that the  
7 inspections are appropriate for what our goals are.

8 MR. GROBE: Good, because  
9 it's a particular area of interest of mine.

10 MR. MORRISON: Okay.

11 Moving on. The Program Reviews that we've been  
12 working on, we've seen a lot of benefit from those. One of  
13 our intentions is, an outcome of my building block is to  
14 make this an ongoing effort for Davis-Besse.

15 So, we're in the process of developing a procedure  
16 that's more attuned to doing this for an operating plant,  
17 and we're going to pilot that here doing program reviews.  
18 And, once we've got this working well for us, our  
19 intentions are to make this a FENOC-wide initiative.

20 And, to do that, we'll take this piloted program  
21 procedure that we're developing right now, turn it into a  
22 NOP, which for FENOC is FENOC-wide procedure. And, we will  
23 initiate program reviews through the Nuclear Services  
24 Department, which is based in Akron.

25 And to help support that activity, we're going to be



1 developing a list of what we characterize as Priority Plan  
2 Programs across the FENOC fleet. And, we will select  
3 several of these programs and evaluate them every year  
4 FENOC-wide.

5 And the goal here is to look at these programs and  
6 look at them on a regulatory compliance perspective, how  
7 we've addressed industry guidance, interfaces and  
8 hand-offs, and we want to look at the implementation and  
9 verify it is being implemented successfully.

10 And, really, this whole thing all ties back to the  
11 root cause effort that occurred back in March. If you  
12 think back to the technical root cause effort that we had  
13 at Davis-Besse, one of the things that we identified was  
14 there were a number of barriers that had not provided the  
15 level of protection that we had expected. Those barriers  
16 were really plant programs. And, there was a population  
17 had let us down.

18 So, with this FENOC-wide effort, we want to go  
19 back and look at what we think are important plant  
20 programs, use as process to make sure they are actually  
21 providing the level of protection that we are expecting of  
22 them.

23 So, unless there is some other questions, I'm going  
24 to turn this over to Clark Price. I think Clark is going  
25 to talk about the O350 progress.

1           MR. MYERS:           We already have  
2 a self-assessment process. In that self-assessment  
3 process, we lay out a yearly schedule of, say, what we're  
4 going to do. I would see this rolling in from a corporate  
5 standpoint into a program reviews yearly to improve the  
6 year before, for each side, and we'll do that across the  
7 sites.

8           And for some sites, you know, like we do have one  
9 boiler, boiling water reactor, we have a few pressurized  
10 water reactors. So, look at it on a site specific basis.  
11 So, Boron evaluation probably will not be a concern too  
12 much at the boiler.

13           But what I anticipate, a yearly group of programs  
14 that we would look at, and we've identified 65 programs or  
15 so now. We'll pick those and make sure they're giving us  
16 the performance they think, we think they should be. So,  
17 that's sort of the way we see this plan now. Okay.

18           MR. PRICE:           If there is no  
19 other questions, I'll continue.

20           I'm Clark Price. I'm the owner of the Restart  
21 Action Plan.

22           One of the things I would like to talk about today  
23 is our overall progress on our 350 Restart Actions that we  
24 have at Davis-Besse, and how we're accomplishing those in  
25 our Return to Service Plan.

1 Starting off with that, I would like to go back to  
2 our basic Building Blocks for a moment and talk about those  
3 Building Blocks. There are seven Building Blocks that we  
4 started off with in our Return to Service Plan, that were  
5 designed to address all the areas, the causal factors that  
6 we identified in our original root cause on the head  
7 degradation.

8 This Building Block Plan, these Building Blocks have  
9 served us very well and continue to serve us very well;  
10 however, as you saw, and Christine talked about it earlier,  
11 the NRC 0350 Panel developed a set of Restart Checklist  
12 items that really, that is what we need to focus and  
13 address for restart.

14 Next slide. So, we started off with Building  
15 Blocks. Then we go to the Checklist items, and I'll be  
16 talking about a chart here shortly that we've designed to  
17 monitor both of those.

18 We developed a number of Davis-Besse O350 Restart  
19 Actions to address each of the 0350 Panel Restart Checklist  
20 Items. And, primarily those were derived from our Building  
21 Block activities. Although, as you heard here today, there  
22 are a few items that are outside the Building Blocks that  
23 are on the Checklist.

24 We've also developed performance indicators and  
25 monitoring tools also to help us monitor the progress of

1 our plans and also help to schedule the inspections with  
2 the NRC. We want to make sure that we're ready for their  
3 inspections when they send out the inspection teams, and we  
4 continue to monitor that as we go.

5 One of the things we also did -- you can go to the  
6 next slide. One of the other things we did, was in our  
7 plans, we have, we took our plans and divided those into  
8 basically a discovery phase and an implementation phase.  
9 The Building Blocks were primarily designed to be discovery  
10 phase building block items, but our overall plan not only  
11 has to address the discovery phase, but also the  
12 implementation of anything we find during that discovery.  
13 And that's where we kind of combine all of that effort into  
14 the overall restart checklist and our restart actions to  
15 support that.

16 What you have in front of you right now on the  
17 screen is a monitoring tool that we use both on site with  
18 our senior management team and our owners of all the  
19 Restart Checklist Items and we also use this as a  
20 communication tool with the NRC to communicate our overall  
21 progress.

22 This report is designed, the lefthand column, the  
23 colored bars is our discovery phase activities. The far  
24 left -- and it's very difficult to read. We tried to get  
25 all of this on one page and it gets kind of small. But in

1 order to do that, we have all the Restart Checklist items.  
2 We have the owners we've assigned at the plant for those  
3 Restart Checklist items. And then we have the discovery  
4 phase and the colored bars, the implementation phase, and  
5 then final closure of the Restart Checklist items.

6 The green identifies those items that we are  
7 complete with from a discovery phase. And, as you can see,  
8 we have a number of completions. Since our last meeting,  
9 we have completed discovery, and Randy Fast talked about  
10 this in his presentation. We completed the discovery in  
11 the Containment Health Discovery Action Plan area. We've  
12 also completed discovery in the Containment, or Containment  
13 Emergency Sump items. And we're pursuing now the  
14 modifications associated with the Containment Sump.

15 Also, we've completed, another item was our  
16 inspections of our Boric Acid Systems outside of  
17 containment. This was another area in our extended  
18 condition, and we just recently completed those. So, we're  
19 making great progress.

20 Another one that's a major milestone and a lot of  
21 work and effort went into this, was the completion of our  
22 System Health Readiness Reviews and Latent Issues Reviews  
23 on our systems. Jim talked about those. That was a major  
24 effort. A lot of people involved in that on site. And we  
25 just finally finished those up. As a matter of fact, Jim

1 said he was signing some of those this morning and they're  
2 all with Lew Myers for final approval, and then they'll be  
3 ready for final NRC inspection.

4 I would like to address just a little bit on the  
5 discovery area where we're not complete yet. The blue bar  
6 up there is an activity in our Management Organizational  
7 and Human Performance area, that we still have a few items  
8 that we are working on right now. We talked earlier about  
9 our Engineering Assessment that's going on right now at the  
10 plant. That's an activity in there.

11 One of the activities in there that is complete, a  
12 number of them is, we talked about those too, was the  
13 Management Root Cause, in addition to Corrective Action  
14 Root Cause, the Operations Root Cause; there is some items  
15 that are complete in that area; however, we still have,  
16 like I said, Engineering Assessment, and then we have a  
17 collective review of all those assessments and root causes  
18 that we'll be doing, pulling all the things together to see  
19 if there is anything from a collective significance  
20 perspective that we have missed in any of the individual  
21 reviews, and that will be the final activity that will  
22 close out that particular item.

23 If you go down further about midway down, you'll see  
24 an item that's labeled 3 Charlie 1 or 3 C-1. Yes?

25 MR. MYERS: We're working the

1 plan there. That's exactly what we would expect right  
2 now. It's not a deviation.

3 MR. PRICE: That's correct.

4 MR. MYERS: Okay.

5 MR. PRICE: Also, we worked in  
6 our plan, we just talked about this one, the next blue bar  
7 down, which is our Quality Audits Program Review. Now,  
8 this was not in the Building Block for Program Reviews;  
9 however, we are using a Phase 2 Program Review, our  
10 approach for that for this review.

11 We completed a root cause of the Quality Assessment  
12 Organization, and now we're in the process of doing a full  
13 Phase 2 Review, utilizing the Phase 2 Program that was  
14 designed underneath the Building Block, but it is not  
15 necessarily under that particular Building Block. It's  
16 underneath the Management/Human Performance Building Block,  
17 as Lew stated.

18 Carrying right down, the two that Neil just spoke  
19 about that are still in progress, which are the  
20 Modification Program and also the Radiation Protection  
21 Program. Those are going to the Program Review Board this  
22 week and next for final review. And we will, we're  
23 targeting to have those completed before the end of the  
24 year.

25 The last one, down at the bottom that is noted as

1 5 C 1, or 5 C, or 5 Charlie, is our Functional Area Reviews  
2 and those are still ongoing. Those are part of the  
3 Management and Human Performance Improvement Plan and a  
4 specific activity that we have in that area.

5 Any questions on that?

6 MS. LIPA: The column over on  
7 the right, not to the far right, but there is a column  
8 about four columns over that says, Ready for Inspection.  
9 So, that, do you plan to fill in that column so we can use  
10 this as a tool?

11 MR. PRICE: Yeah. One of the  
12 things before it's ready for final inspection, it's  
13 important to know, Christine, there is a column there that  
14 has yes in it or it's blank; if that's the one you're  
15 referring to?

16 MS. LIPA: Right.

17 MR. PRICE: Bottom, basically,  
18 we have a process we go through as part of the Restart  
19 Action Plan, which includes a closure package and  
20 validation of those closure packages. And until that's  
21 completed, which requires Lew Myer's signature, it is not  
22 ready for inspection. So, even though we've completed the  
23 phases, some of these items Lew has not had the final  
24 sign-off on. When he does, which will be very shortly, a  
25 number of these, the yes will go in there and we'll be



1 ready for the final inspection from the NRC.

2 On the right side we have another -- I'm sorry. Go  
3 ahead.

4 On the righthand side, we have a number of actions  
5 that are going on in the implementation phase. Many of our  
6 implementation actions are, go on concurrent with  
7 discovery. We don't wait until we're completely done with  
8 discovery before we start correcting what we found.

9 And, as you can see, we have a number of actions  
10 that are, a number of areas that are progressing quite  
11 well, as a matter of fact.

12 MR. GROBE: Yeah, Clark, I  
13 appreciate you bringing this slide forward. As you're  
14 aware, we meet once a week on this slide, about a half a  
15 dozen or eight pages go behind it that provide a lot more  
16 detail, but this is probably very difficult for the folks,  
17 the public to consume.

18 I would suggest that between now and next month, you  
19 come up with a way to better portray the same data. I  
20 think it's a great way of tracking what's going on, but  
21 better portray the same data, but in a more human friendly  
22 atmosphere.

23 MR. PRICE: Okay.

24 MR. GROBE: So, it can be  
25 understood more easily.

1           MR. DEAN:           I guess I would  
2 offer in some earlier meetings, we had had some performance  
3 matrix, individual performance matrix, individual graphable  
4 display; that seems to be pretty reasonable.

5           MR. MYERS:           We've got those  
6 too.

7           MR. PRICE:           This is just one  
8 of high level overview monitoring tool that we're using.  
9 We also have our performance indicators. And, I guess one  
10 of the things I would like to say then, I'm going to talk  
11 about some performance indicators here shortly, is one of  
12 the most significant things I feel with our discovery being  
13 essentially complete on what we've completed today, is we  
14 have completed a lot of material issues, the discovery and  
15 material condition issues of the plant.

16         As you saw, most of the open items in the discovery  
17 phase are in the Management/Human Performance area, Program  
18 Reviews. And we pushed through the discovery phase in the  
19 system areas so we got the work identified, the issues  
20 identified, and now we can go address and resolve those  
21 issues. That was a very important phase that we needed to  
22 get through in our Restart Plan.

23         On this next slide here, we're talking about again  
24 completion of discovery. We're nearing that completion.  
25 We have a number of open restart condition reports and I'm

1 going to get up in a second and address very briefly those  
2 graphs that are hanging on the back wall.

3 And, but let me just continue on here with the  
4 Operational Performance Indicators. We have a number of  
5 indicators in what we call Operational Performance, which  
6 are places where we look at workload, backlogs and those  
7 types of things. And we're holding steady in those areas,  
8 which is good. We're identifying an awful lot of work, but  
9 yet we're keeping up with that work.

10 The Organizational Readiness Performance Indicators  
11 are all showing steady to improving. And those performance  
12 measures tend to be the areas where we're looking at  
13 Quality and Human Performance, and we're seeing steady and  
14 improving trends in those areas.

15 One of the things that's very fundamental in our  
16 whole Building Block effort and our Return to Service Plan  
17 is the use of our Corrective Action Program. And through  
18 that process, we have identified many conditional reports  
19 that have documented the issues that we have found during  
20 our discovery phases of our activities. And then we also  
21 then have corrective actions that come out of that.

22 If I could, I'll try to speak loud enough for  
23 everybody to hear. I'll give everybody an opportunity to  
24 stretch a little bit.

25 We have a number of charts and these are some that

1 I've shown in previous meetings. One of the things that we  
2 saw in previous meetings is we were in the upwards incline  
3 here, which meant we were still discovering more than we  
4 were fixing. And this is an, all these graphs here  
5 represent, or charts represent open condition reports and  
6 open corrective actions.

7 The first two here are the total population  
8 condition reports that we have that are open right now that  
9 are classified by restart, classified as restart. The  
10 Restart Station Review Board, which Bob Schrauder carries,  
11 classifies all condition reports and all corrective actions  
12 that come out of the condition reporting process, as  
13 whether or not they're required for restart.

14 This is the total population of restart actions. It  
15 actually is greater than just the O350 population of work  
16 that we have. This is all things that we've identified  
17 that we desire to have completed prior to restart also.

18 As you can see and what's very important,  
19 management of the site and employees look at these curves,  
20 because what we've seen in the last about a month ago, we  
21 finally peaked and now as we completed the discovery phase,  
22 our closure of those evaluations on those condition reports  
23 are now seen incoming, and we're now in decline, we're  
24 working those off, to restart.

25 What you see basically is, these are, this is a

1 total, the next three sets are major building block areas  
2 for our, that we discussed. First is System Health  
3 Reviews. The next is the Program Compliance. And the last  
4 is Containment Health.

5 Those are all the different major Building Blocks  
6 that generated the majority of the condition reports and  
7 the discovery items that we found prior to executing the  
8 plan.

9 So, this is a good news story. We're now catching  
10 up with the, with our workload. We're driving these curves  
11 down. We have a lot of effort in this area of focus  
12 getting through our evaluations. Because, as probably Jack  
13 would tell you, he considers some of that still the  
14 discovery phase. And, and it is through true, through  
15 those evaluations, we could determine that there are more  
16 areas of work that we have to do. That's why we need to  
17 get through those quickly, get the corrective actions  
18 defined, and get those into the schedule that Mike has to  
19 make sure that we got all those, that we can, all those  
20 scheduled out for restart.

21 So, I believe that's all I had to share today. I  
22 think one of the things, I think we made significant  
23 progress in the last month. We've really been working hard  
24 to get some of these discovery activities to closure, and  
25 we made good progress in the last few weeks in

1 accomplishing that.

2           MR. GROBE:           Before you go on,  
3 Lew. Clark, I appreciated the way you described the  
4 completion. And we would agree that the head resolution  
5 area is essentially complete and our inspection was  
6 recently issued on that topic and Containment Health is  
7 essentially complete and we issued a report recently on  
8 that.

9           You've described today two of the six programs are  
10 yet to be completed, and I think the chart accurately  
11 depicted that. And Management/Human Performance, you still  
12 have the corporate oversight and the engineering function,  
13 root causes, as well as collective significance; and I  
14 think your chart accurately depicted that.

15          The thing that I want to make sure is not lost, is  
16 this meeting later this month on engineering design issues  
17 is critically important. And I view the eight additional  
18 reviews and any further activities you determine are  
19 necessary to be discovery, and you're going to identify a  
20 significant number of issues, as you have already  
21 identified in each of your prior design reviews.

22          So, there is no doubt in my mind that there will be  
23 many condition reports coming out of those reviews, and  
24 this may not, you know, we have to discuss the extent of  
25 that review; and we'll do that hopefully on the 23rd.

1           MR. MYERS:           Right. We would  
2 agree with that. You know, I think what we want to show  
3 the public, if you go look at our basic Building Blocks  
4 right now with the first slide, from a System Walkdown  
5 Standpoint, Containment Inspection Standpoint,  
6 Management/Human Performance Standpoint, we got a lot of  
7 the discovery done. In fact, most all of it is done. But  
8 we didn't wait to finish all the discovery, there's  
9 actually been a lot of work done in containment stuff.

10          So, we didn't wait to finish all discovery. You see  
11 that turning green, over to the next column is  
12 implementation. You see that implementation is well under  
13 way also. So, if you walk away with those two things, of  
14 that whole chart, that's all that we wanted to  
15 demonstrate.

16          We made good progress on discovery. We also made a  
17 lot of implementation progress also. You can see that in  
18 our containment, the system walkdowns we've done, the valve  
19 repacking program now, and the draindown window, reactor  
20 coolant system. So, there is a lot of implementation going  
21 on. Okay?

22          MR. DEAN:           Let me offer one  
23 observation and perhaps a question.

24          Having been involved with plants in the past that  
25 have gone through a significant discovery phase, I don't

1 disagree this is kind of an important milestone when you  
2 get to the point where your work-off rate starts to exceed  
3 your discovery or input. That is a milestone.

4 But it's easy for us to get captured a little bit  
5 about looking at things like corrective actions and your  
6 hardware related issues, but we have to go back to the fact  
7 that a major factor in this whole issue at Davis-Besse  
8 revolves around safety culture related issues. And I think  
9 it would be important at future meetings to be able to  
10 present performance indicators and things that you are  
11 monitoring that indicate in some objective sense progress  
12 that you're making in terms of addressing the safety  
13 culture related issue.

14 MR. MYERS: Okay.

15 Next area we have is, we want to take a few moments  
16 to talk about some recent changes we've made at the plant,  
17 and from a FENOC alignment standpoint. Bill Pearce and I  
18 will talk about that.

19 In general, if you go look at our Building Blocks,  
20 we talked about the discovery phase, you know, coming to an  
21 end, and those latent issues areas.

22 What we want to do now, we're focusing on reloading  
23 the core, pressurizing the containment, pressurizing the  
24 RCS later on. That's on the near horizon for us. In order  
25 to get there, we've got to do is, we've got to make sure



1 our plant management staff, if you will, is in good stead;  
2 and that gets back to that safety culture issue.

3 So, what we did recently is, we had some significant  
4 reductions I think in contractor work force. I've heard a  
5 lot about that. In general though, what I want to tell you  
6 is, we reduced like 380 contractors at our site, and there  
7 is still another 900 there now. So, from a staff  
8 standpoint, there is still a lot of people at our site,  
9 over and above our normal 800 people that we have.

10 And, so we had some things that we wanted to  
11 accomplish. First, we have certain contractors that are  
12 fairly large contractors, engineering groups that we do  
13 business with; FirstEnergy Nuclear Operating Company, we  
14 want to make sure that we were aligned with those  
15 companies.

16 So, as we took this effort, it was to realign us  
17 with the companies that we normally do business with and  
18 their management; engineering companies, companies that  
19 supply us craft support, companies that supply us health  
20 physic support, training support and all that. That was  
21 one of our goals.

22 The next thing we want to do is align us, so we  
23 could be more operations focused, if you will, then we  
24 could assess our own internal performance. For example,  
25 we've had this group together called Restart Senior

1 Management Team. Well, it's time to quit calling it the  
2 Restart Senior Management Team, and really have the senior  
3 managers that we brought into this plant take a leadership  
4 role in moving the plant forward.

5 So, sometimes we've had some of our contractor  
6 groups reviewing things. We intend to put our managers  
7 more in the line organizations; and you'll see us making  
8 that shift.

9 Then finally, you know, we wanted to make sure that  
10 we had the contractor level in an area that we could manage  
11 effectively. One of the things we've done for each  
12 Building Block now is, we've gone through the discovery,  
13 we're trying to get the work done for example in the  
14 containment.

15 We've taken our key contractors and aligned the key  
16 contractors with the Building Blocks. What that helps us  
17 do, what that helps us with is to focus on that key  
18 contractor, whether it be an engineering contractor or a  
19 maintenance contractor, to ensure, like for instance on  
20 these draindown window, that we have one group of people  
21 that's focused on that work and we can do the work  
22 efficiently and effectively.

23 So, those are the three objectives that we try to  
24 accomplish. We think that aligned us well with our other  
25 FENOC stations, and we think that also sets us up to make

1 the next step in loading the core, pressurizing containment  
2 and then finally doing the, the hot operational testing.

3 If we can do all that well as a management team and  
4 error free, then that helps regain public confidence about  
5 our ability to effectively manage our plant. So, that  
6 worked okay.

7 While we're doing this, we realized it would cause  
8 some management concerns, so we've asked oversight to take  
9 a look at the effects of that, and Bill Pearce will discuss  
10 that, how we're doing that.

11 MR. PEARCE: Okay. When we  
12 made this change, I guess our concern in the Quality  
13 Assurance Organization was that any time you have a change,  
14 you're at risk to introduce some things you didn't mean to  
15 introduce with it. So, the QA manager and myself decided  
16 it would be prudent for us to increase our level of  
17 oversight during the period of this change.

18 So, we decided what we wanted to look at, was to  
19 look at the new makeup of the Engineering Assessment Board,  
20 the effectiveness and quality of the Engineering Assessment  
21 Board review of Latent Issue Reports, and the quality of  
22 System Health Readiness Review Reports ~~without~~ with that  
23 Engineering Assessment Review Board.

24 So, that's in addition to what we had been looking  
25 to previously. And, some of the things that we did, is for

1 the Restart Station Review Board, we had an increased  
2 quality assurance oversight level and we increased the use  
3 of QA Evaluators with operations experience to give them  
4 more broader view of what we're looking at.

5 We revised, we looked at the revised membership on  
6 the review boards. There were several review boards put in  
7 place initially to get through some of these latent issue  
8 reviews. So, we tried to look at the membership of those.  
9 We examined them for their background and their  
10 credentials. And the activities and results of the board  
11 meetings, we are carefully observing to make sure there is  
12 no loss of quality as the boards have changed.

13 What I brought you today, this has gone on over the  
14 past few days, so I have some fresh information about what  
15 we found in doing these things. We not only made a plan,  
16 this is what we seen on the front end of the  
17 implementation.

18 As part of our review, we talked to the EAB members  
19 to discuss their qualifications, and found that based on  
20 their background they were knowledgeable in the subject  
21 areas they were looking at. And, at least two members on  
22 the Engineer Assessment Board Review Team for Reactor  
23 Coolant System were long time Framatone personnel. One is  
24 currently system engineering manager there.

25 Three, four permanent Engineering Assessment Board

1 members participated in and observed the review of Aux.  
2 Feedwater on the fifth of December. As a recent one that  
3 they all participated in, so that was kind of a carry over  
4 for them.

5 Says, probing questions were asked by all members of  
6 the EAB team, which demonstrated they had time to review  
7 the reports ahead of time so they were knowledgeable about  
8 what they were reviewing.

9 Placed emphasis on operating experience to ensure  
10 that the latent issue team members properly captured what  
11 was required. That was a comment that was made. And one  
12 of the EAB Panel Review members for the Emergency Diesel  
13 Generator Team was the plant's station blackout diesel  
14 engineer, which it's the same engine; one is emergency  
15 diesel, other is blackout. So, it had a lot of information  
16 and expertise in the area that they were looking at.

17 His line of question reflected his own experience,  
18 presenting the station blackout diesel generator report  
19 previously to the EAB. So, they're utilizing the  
20 experience they gain.

21 I guess one perception we have in the Quality  
22 Assurance Organization, is we did a pretty good job of  
23 making the transition, and that the people that we have  
24 presently doing those assessments, seem to have the proper  
25 qualification and background to do them, and that the

1 quality of the assessments is not going to suffer because  
2 of the change. That was what we were really trying to come  
3 to the conclusion of.

4 We increased our oversight because of that. And  
5 now, since the change has transpired, we'll go back to our  
6 normal plan. But, we just wanted to tell you that we did  
7 look harder because we made the change, and we've looked,  
8 I think we tried to see if there was going to be any  
9 problem associated with that, and it seems like everything  
10 went pretty well.

11 Okay, Lew.

12 MR. GROBE: Bill, I wasn't  
13 associated in this level of detail with Davis-Besse three,  
14 four years ago, as I am today, but my sense is that this  
15 sensitivity exhibited by the quality organization may not  
16 have existed several years ago to being responsive to  
17 changes in the station and increasing oversight. And I  
18 really appreciate the fact that your organization is  
19 functioning in a real time nature to balance your level of  
20 confidence with an application of resources in areas where  
21 you wanted to make sure that things are going well.

22 And certainly a time of transition is a time where  
23 you could have problems, so I really appreciate that.

24 We performed a number of inspections over the last  
25 several months and reported on them last month. One of

1 those was in the System Health area. And we likewise would  
2 probably be performing some additional work as you go  
3 through these additional design reviews to also regain  
4 confidence that the, the new people and the new structure  
5 are working as good as the prior reviews had worked.

6 MR. DEAN: Bill, I have a  
7 question. In looking at the things, the assessment of the  
8 impact in terms of the new makeup of the board,  
9 effectiveness in quality, the quality of the System Health  
10 Readiness Reviews; you talked about the impact of the  
11 Engineering Assessment Board, but what have you done in  
12 terms of looking at the quality of the System Health  
13 Readiness Review about the EAB review.

14 MR. PEARCE: We reviewed those.  
15 I got some information here, although it's -- we think that  
16 the quality of the reviews have not changed since the board  
17 has not done the final inspection of them any longer and  
18 it's being done in the line management. We're looking at  
19 the final product now.

20 There is a lot of them are already done and went  
21 through the board, so we've got, there is a template that's  
22 kind of been put in place of what acceptable and what is  
23 not. And the new ones going through now are the same  
24 quality level, fit the same template, got the same types of  
25 information in them, and seem to go to the same depth as

1 they were previously when the board was reviewing them,  
2 Bill.

3 MR. DEAN: Okay. Is your  
4 intent, I didn't quite gather from your comments whether  
5 you feel like you've completed your assessment efforts to  
6 look at this transition or do you still intend to have some  
7 enhanced observation in QA activities to monitor?

8 MR. PEARCE: Well, we were  
9 involved all along in the boards that were going on, and  
10 did overviews, but in this, for this case, the last five  
11 latent issue reviews, wasn't it five, I think it was five  
12 that went through; we went through all of them. We had  
13 somebody at each one of them, sat through the entire  
14 thing. We just didn't do sampling, we sat through the  
15 entire thing, and watched that.

16 So, we'll go now back to our baseline level review  
17 where we do sampling, and look at it in that regard.

18 MR. DEAN: Okay.

19 MR. PEARCE: The comment you  
20 made about looking for change, I remembered a quote, and I  
21 got this actually from a quality assurance guy about 15  
22 years ago. He told me that "Change is the mother of  
23 trouble and trouble is the mother of change." And I think  
24 that that is, you know, you think about that, it is like  
25 that. And, we need to be sensitive to change.



1 MR. MYERS: We need to make  
2 it.

3 MR. PEARCE: We need to make  
4 it.

5 MR. MYERS: Are you ready for  
6 conclusion?

7 MR. GROBE: Absolutely.

8 Any other questions?

9 Go for it.

10 MR. MYERS: Good, thank you.

11 You know, we talked about our reactor head today.

12 If we go to the next slide. Reactor head is on the stand.

13 It's painted. The electrical lines are on the head.

14 Everything is ready to go. It's our intention to set the

15 head up, fit in the near future. Demonstrate that it fits

16 well and everything. So we made progress there and that's,

17 that's going forward.

18 Our System Readiness Reviews are complete. They're

19 on my desk. That might take a week or so, because my

20 intention is to sit down with a large group of engineers

21 and eye-to-eye and go through the System Readiness Reviews

22 before I sign them. So, they're basically complete.

23 Containment Health is good. The emergency sump is

24 moving along. We think that it's going to set an industry

25 standard. Integrated Leak Rate Test Program establishes a

1 new standard also for this industry. We think we'll have a  
2 procedure process and way of identifying leakage and  
3 formalize that, so that we'll be a model for other plants  
4 to come and look at.

5       Additionally we're installing the Flus Monitoring  
6 System, which is a new piece of technology that no other  
7 plants in the United States has. And we think that's going  
8 to make us sort of unique too.

9       So, Containment Health is good. Walk in our  
10 containment now, material condition looks very good, we  
11 think, compared to other containments I've been in, in the  
12 United States.

13       Preparations are underway for core load in the near  
14 future, January. Containment testing. Then operational  
15 testing. And it's our intent then not just to bring the  
16 plant up and pressurize it, but we have an integrated test  
17 procedure we're putting together to go look at our  
18 equipment to make sure it's going to function well. A lot  
19 of our equipment hasn't run in about a year; steam pumps,  
20 steam dumps, things like that.

21       We intend to give a good baseline so the plant will  
22 be ready for restart, during this plateau. Then we'll cool  
23 back down and go look for any potential leakage that we  
24 might have, and do some more maintenance.

25       That's a change of the initial plan that we had from

1 several months ago. So, we think it's a good approach. We  
2 find something, we fix it.

3 Per Management/Human Performance, we talked about  
4 safety culture. Let me spend a moment on that. You know,  
5 I think that we're well under way of creating a Safety  
6 Conscious Work Environment at our plant, where people can  
7 bring issues forward. I won't say we're perfect by any  
8 means, but we're taking good steps there to make sure that  
9 process; that I have an open door policy, my managers have  
10 an open door policy. We've been trying to train them,  
11 people in safety conscious work environment, so they know  
12 how to address problems. We're trying to get them in a  
13 more proactive role.

14 We talk about that at all of our 4-C's meetings. We  
15 talk about that at our group meetings. We've done  
16 training. So, we feel we're making good progress there.

17 One of the best things from safety culture  
18 standpoint is in my mind, is find and fix problems. We  
19 have a whole bunch of routine problems that we probably  
20 didn't have to fix at our plant. You look over at our  
21 graph, that's way over and above the 350 process. Find and  
22 fix problems.

23 I love the valves and the draindown, the window we  
24 went after, because we wanted to as a management team.  
25 Nothing in the 350 process told us to go put in a reactor

1 cavity seal plate. That's a tough model, we did that on  
2 our own. That's the right safety culture. And we're  
3 driving to make sure that safety culture is in place.

4 Strong operational leadership. You know, most of  
5 the managers we have at our plant now are previous SRO's.  
6 Bill Pearce was my shift supervisor when I was a young boy  
7 at another plant. So, life is a lot better now.

8 If you go look, down to our maintenance manager,  
9 he's a previous SRO. The quality manager that we have in  
10 place, certification. So, our management organization has  
11 a very, very high respect for operational issues.

12 And, for example, a lot of the issues in the  
13 Corrective Action Process, I spoke up during this meeting;  
14 we write a condition that we think is an operability issue  
15 or question, then it's up to us to go back and convince the  
16 shift supervisor that we have this bounded. That  
17 atmosphere didn't exist, and we're going to make sure it  
18 exists when we start the plant back up.

19 We have CR's generating. The person that's going to  
20 make that operability calls is the shift managers, like it  
21 should be.

22 I want to talk about our people for a few moments.  
23 We brought in a management assessment firm and they've  
24 looked at our people. You know, I've worked at several  
25 plants in the United States myself. I've worked at plants

1 where the population is a 30 mile radius amongst two  
2 million people or so. You didn't know each other very  
3 well. The community was very large. This is not a large  
4 community.

5 I've worked at plants where we've brought people in  
6 from the outside and they became part of the community over  
7 the years, but they weren't from the community, they were  
8 outsiders.

9 One of the things as a management firm we brought in  
10 told us, I think is a strength, is that the people at our  
11 plant, you know, are from this area. Many of them got out  
12 of high school and went off to college, and got their  
13 degree so they could work at this plant. They're not  
14 move-ins, they're people that are from this area. They are  
15 the community. They are the community.

16 And we have meetings scheduled now with our people  
17 to go out in the community as we start returning the plant  
18 to service, and I think we have like 17 meetings scheduled  
19 in the next month or so, to meet with community people.  
20 And we've been doing that all along to show to them,  
21 demonstrate that we're ready to restart the plant.

22 We paid all this money for a consultant. I want to  
23 tell you who it is. I went to my barber over in Port  
24 Clinton the other day. She said, I could have told you  
25 that without going to a management consultant. Most people

1 I went to high school with, two of my best friends went and  
2 got their college degrees just so they could work at  
3 Davis-Besse. Just so they could work here.

4 My message again is, I think we have good people at  
5 our plant. The issue wasn't a safety culture that's bad  
6 with our people, it was that we didn't implement from a  
7 management standpoint a strong safety culture. There is no  
8 balance between production and safety, it's the gate you go  
9 through. And what we're doing is demonstrating that every  
10 day at work. Thank you.

11 MR. GROBE: Any other  
12 questions?

13 Well thanks, Lew.

14 Each month as we've met, we've seen progress.  
15 Sometimes the progress was learning how to do discovery  
16 correctly. Sometimes the progress has been much more  
17 substantial. And this month is not a change. We continue  
18 to see progress.

19 The three areas where we have the largest amount of  
20 inspection work left are in the Systems and Design Area,  
21 the Programs Area and Management/Human Performance. Your  
22 Programs Area is further along. We'll be probably digging  
23 into those areas again in detail in January.

24 I think we have the dates for our next three  
25 meetings. I don't know that we've announced them

1 publicly. January 14th, we'll be here. That's, these are  
2 Tuesdays. February 11th and March 11th. I'm not sure if  
3 we'll be in this facility. This is the first time here.  
4 We're going to evaluate the adequacy of this facility after  
5 we're done, make sure it meets our needs, and see what  
6 their schedules are and see whether they can support us in  
7 the future. We'll be back here in the local area, January  
8 14th, February 11th and March 11th, and we look forward to  
9 those meetings.

10 Again, I want to emphasize, a very important meeting  
11 on the 23rd, tentatively, and we'll be announcing that  
12 publicly as soon as it's firmed up. It will be in Region  
13 III. That's somewhat unique for us. We try to have as  
14 many of our meetings as possible here at the site. Because  
15 it's going to be at Region III, we'll be video  
16 teleconferencing to our headquarters office where folks can  
17 observe it there. Obviously, folks can come to our Region  
18 III office, there will be a public meeting there in  
19 Chicago. We'll also have telephone hookups, so if anybody  
20 is interested wants to patch in by phone, we'll be doing  
21 that also.

22 Why don't we take a very short break. It's 10  
23 after, according to my watch. I'll have to synchronize  
24 with Christine here, and take a five minute break and we'll  
25 reconvene for the public section of our meeting in five

1 minutes. Thank you.

2 (Off the record.)

3 MR. GROBE: What we would  
4 like to do now, I appreciate those who are left, having the  
5 staying power for this meeting. I think it was quite  
6 informative.

7 What we're doing now, is entering a time where the  
8 NRC is going to meet with the public, and we're interested  
9 in your thoughts, your feedback, any questions you have,  
10 any suggestions you have for us. We're open to, to  
11 anything.

12 What I would like to do is proceed and ask local  
13 elected officials if they have any, or representatives of  
14 local elected officials, if they have any questions or  
15 comments, they want to come forward first, I would  
16 appreciate that.

17 And if he we could each limit our questions to a 3  
18 to 5 minute time frame, we could get to everybody and have  
19 time to get to dinner too.

20 Hello, Jere.

21 MR. WITT: Hi, Jack.

22 Jack, I am older than you, so I have a prepared  
23 statement, so I didn't forget to say what I wanted to say.

24 My name is Jere Witt. I am the Ottawa County  
25 Administrator and a member of the Restart Overview Panel.



1 As a member of the Restart Overview Panel, I have been  
2 intimately involved in the process since the beginning and  
3 have learned more about nuclear power than I ever intended  
4 to know, but I appreciate the opportunity.

5 I also have been involved with the Davis-Besse  
6 nuclear power plant almost since its beginning, because I  
7 have been in this position almost 25 years and have worked  
8 closely with the plant over the years. I am not a nuclear  
9 expert and never will be, but I believe I bring a common  
10 sense approach to the panel along with the ability to ask  
11 tough questions.

12 The biggest stake holder in this process is Ottawa  
13 County. It affects all of us in many ways, especially the  
14 families of the employees. Safe operation of the plant has  
15 and always will be my first priority. It is obvious that  
16 Davis-Besse and the Nuclear Regulatory Commission both made  
17 mistakes as part of this incident; and they have admitted  
18 so.

19 The Restart Overview Panel's function is to provide  
20 independent oversight and review of plant activities in  
21 regards to restart. This panel is made up of industry  
22 experts and myself as a representative from the county.

23 They probably have asked the toughest questions of  
24 anyone in this process and will press on until all issues  
25 are resolved satisfactorily.

1       The Restart Overview Panel has been in containment  
2 and will go back, because they are committed to this  
3 assignment.

4       All of the members of the panel have added  
5 additional expertise in some manner during this process.  
6 It was never intended to be and never will be a rubber  
7 stamp.

8       I believe we must evaluate the value of the  
9 continued operation of the Davis-Besse Nuclear Power  
10 Station in terms of safety, and value to the community.  
11 Mistakes were certainly made in regards to the head  
12 incident, but there have been many good things happening at  
13 the plant over the years.

14       We must ensure that this type of incident never  
15 happens again, and get back to operating the plant safely  
16 and as a benefit to the community.

17       This has been a monumental task for everyone, and  
18 the process to get there is unbelievable, but I believe  
19 that the indicators show that we are moving forward. Let  
20 there be no mistake, there is a lot of work to do yet, but  
21 I believe you are getting there.

22       The management team and the process is in place to  
23 make the right decisions and lead this process to  
24 completion. The employees are a dedicated group that live  
25 here and want to do what is right. It's been a tough

1 process and they have worked long and hard to get to where  
2 they are today.

3 I congratulate you on the improvements you have  
4 made. Keep up the good work.

5 Davis-Besse has made many improvements that go above  
6 and beyond the required O350 process. Unfortunately, the  
7 public will never see all the improvements and changes that  
8 have been made. The process has been long and tough, but  
9 the end result should be a good one.

10 There has never been any effort that I am aware of  
11 to not address an issue, but to the contrary, they are  
12 going above and beyond to address issues.

13 The plant has also planned for improvements that  
14 will continue to be made after restart. I believe it is  
15 now time to move forward with the safe restart of  
16 Davis-Besse at the time when the plant and the NRC has  
17 addressed all of the necessary issues appropriately.

18 I urge everyone to give the Davis-Besse team and the  
19 Nuclear Regulatory Commission the opportunity to make it  
20 happen, and work with them to get there.

21 I believe you can safely operate this plant in the  
22 future, but also believe that close scrutiny must continue  
23 by Davis-Besse, the NRC, FENOC, FirstEnergy, the County and  
24 the public.

25 My family lives here along with my grandchildren,

1 and I would never suggest restart if I believe a credible  
2 safety risk is involved. It is time to move forward in the  
3 process, and restart with safety as the number one and only  
4 goal. Thank you.

5 MR. GROBE: Thank you very  
6 much, Jere. I did notice earlier that another member of  
7 the Restart Oversight Panel was present at this meeting.  
8 He left a bit ago. That is Christopher Bakken. He's Chief  
9 Nuclear Officer from ~~Merit~~ American Electric Power Corporation.

10 And, of course, Bob Saunders, President of FENOC is  
11 here.

12 I attend as well as some of the other NRC staff  
13 those meetings each month. And Jere is right, they're a  
14 challenging committee and I appreciate their contribution.

15 Yes, sir.

16 MR. KOEBEL: Thank you, Jack.

17 My name is Carl Koebel. I'm President of the Ottawa  
18 County Commissioners, and I'm here today to represent the  
19 feelings of the Commissioners toward what got us here.

20 Davis-Besse, as we've seen today through it's  
21 management and its staff has worked extremely hard to get  
22 to this point. And I think what I heard today and what was  
23 stressed today was change. And I know from previous  
24 experiences in other departments and with the county staff,  
25 change is difficult. Change is always consistent, but it's

1 difficult.

2 And, especially when you look at change in an area  
3 like Davis-Besse Nuclear Power, where it can affect the  
4 people, it can affect the community, and it's from the  
5 people that live and work, that work there, live within the  
6 community, that stress has to be very, very high on them.

7 And I commend the staff of Davis-Besse for doing  
8 what they're doing. And I commend them for the progress  
9 that they've made today, both the staff and the  
10 management.

11 Davis-Besse is very important to Ottawa County.  
12 There is no question. And I appreciate that Davis-Besse  
13 over the years has kept the county very well informed of  
14 what was going on at the plant. And the NRC has been very  
15 helpful in keeping us informed of what's been going on  
16 during this oversight review.

17 I also would like to commend Davis-Besse for  
18 allowing us the opportunity to have representation on their  
19 Restart Overview Panel by allowing us to have Jere Witt sit  
20 on that panel. It's been very, very helpful to us.

21 One thing we know is that our expectations are that  
22 that plant must be operated with safety as priority one.  
23 We heard that today from Mr. Myers. We heard that at  
24 previous meetings. And I really believe that there is a  
25 definite commitment from management and employees at

1 Davis-Besse that priority one is safety, priority one will  
2 be safety and that priority one safety will build again the  
3 confidence that we've had in the past of Davis-Besse.

4 We lost some of that confidence. We're gaining it  
5 back every meeting, every meeting, every meeting. Today,  
6 my confidence gained more than it did the last month. And  
7 I think next month it will gain even more, because we're  
8 seeing a move toward restart. And we know how important  
9 that is.

10 Why is it important? Think of the contributions  
11 that Davis-Besse has made to this county. We just went  
12 through a tornado. Because of the Davis-Besse siren, we  
13 were able to warn the people. And, although we lost a lot  
14 of property, we lost no life and we had no serious harm to  
15 anyone. And that was, one of the reasons were the people  
16 were able to be notified. Why were they able to be  
17 notified? Because of the siren system for Davis-Besse.

18 We also were able to expand that siren system  
19 outside of the ten miles going around Davis-Besse, and to  
20 the rest of the county, thanks to the help of Reggie  
21 Strauss, one of the employees of Davis-Besse. We were able  
22 to get those, and we know there is a hundred percent  
23 coverage of every home in the county. We could not have  
24 done that without the quality of people that are, were  
25 presented to us through Davis-Besse.

1 One of our, one of our members ran into an  
2 individual that worked at Davis-Besse, who informed them  
3 that Davis-Besse allowed them off work to work with the Red  
4 Cross during this last tornado. Most industries wouldn't  
5 do that.

6 Our funding for our EMA through Davis-Besse has  
7 allowed us to have training for things that we have to live  
8 with on Davis-Besse because of where we are. Things like  
9 floods, many of the other natural disasters. Through the  
10 Davis-Besse training, we have been able to handle those  
11 disasters much better than we would without Davis-Besse.

12 Of course Davis-Besse is our largest employer. Not  
13 only does it provides jobs for our people, it provides  
14 taxes for our government to run and it also provides  
15 business opportunities for the other businesses in the  
16 county.

17 One of the examples that nobody thinks about is,  
18 small things like funding the radio system for our law  
19 enforcement and our fire and our EMS. This is being done  
20 by Davis-Besse. And they're not tooting their horn.  
21 They're not going out bragging about it. And there is so  
22 many other things like this, that we could go on for hours,  
23 but I don't have the time and I'm sure that everybody else  
24 is as hungry as I am.

25 So, what I would like to do is say, what do we get

1 if we don't start Davis-Besse? We get a mortar and brick  
2 building that contains radioactive material, and that's  
3 good for no one. If we restart Davis-Besse with priority,  
4 safety as priority number one, we get jobs, we get dollars,  
5 we get a well run plant, we get growth in this county, we  
6 just get everything that we need that's positive.

7 That's where we need to go. That's where I think  
8 we're headed, and I commend you all for getting us to this  
9 point. Thank you.

10 MR. GROBE: Thank you, Carl.

11 The charts over on the wall describe hardware and  
12 software issues, program issues, but I thought Bill Dean on  
13 my left asked an excellent question, and that is that we  
14 need to get a little more into the issues that got  
15 Davis-Besse into the situation they were in; and that is  
16 the cultural issues.

17 We heard a little bit today about the cultural  
18 changes that are going on in Operations, and we ask that  
19 that be expanded on in our next meeting, and that's good.  
20 And Bill asked that we get some additional information on  
21 the Safety Culture, Safety Conscious Work Environment, any  
22 performance indicators that the company is using. And  
23 there is several of them, as well as we had talked  
24 previously about safety culture, I believe it was the  
25 meeting at the Davis-Besse Administration Building.



1       And Bill Pearce indicated that they had planned an  
2 additional survey of the staff to, to evaluate the  
3 attitudes and views of the staff. And in meetings last  
4 evening with Lew, I understand that FirstEnergy is planning  
5 a little bit broader assessment concept of Safety Culture  
6 and Safety Conscious Work Environment. And, that will be  
7 on our agenda for next month also.

8       Carl indicated that Davis-Besse folks may have lost  
9 some people's confidence in their performance that led up  
10 to the discovery last March. He was generous in not  
11 focusing too much of his comments on the NRC. The NRC I  
12 think also lost some public confidence. And, I hope each  
13 of you that's been able to attend these meetings has been  
14 able to see how we do our job and get a better perspective  
15 and understand the efforts, the self-assessment efforts  
16 that we're going through.

17       Last month, Art Howell, who is my counterpart in  
18 Region IV in Texas, presented our own self-assessment and  
19 corrective actions were taken. There will be a commission  
20 meeting I believe sometime in January where the  
21 commissioners are going to hear the results of that  
22 self-assessment, what corrective actions we're implementing  
23 to improve our performance.

24       Are there any other local elected officials or  
25 representatives of elected officials that want to come to

1 the microphone? Yes, sir?

2 MR. OPFER: Good afternoon. I

3 appreciate the opportunity to testify today. My name is

4 Darrell Opfer. For ten years, I was a County Commissioner

5 during what I call the middle period at Davis-Besse. For

6 nine years, I was a State Representative, and the point

7 person of my caucus on the discussion and eventual adoption

8 of deregulation. Currently, I've been for two and a half

9 years the Director of the Ottawa County Improvement

10 Corporation, which is the Economic Development Agency for

11 Ottawa County and its various subdivisions.

12 A couple of comments that I would like to make today

13 with regard to the importance of Davis-Besse to our

14 community. And I do this, because when I was in the

15 Legislature, a number of my fellow Legislators found it

16 difficult to understand why I was supportive of nuclear

17 power, and the Davis-Besse Plant in particular.

18 One of the things that you need to understand is

19 that within a few miles of where you're sitting, actually a

20 few thousand feet, Ottawa County for a number of years had

21 a major employer; and that was the Erie Ordinance Depot and

22 the Erie Army Depot which employed thousands of people and

23 brought thousands into the county during, especially during

24 and after World War II. That no longer exists, and we're

25 still struggling to try to increase the amount of

1 employment at that site to a portion of what we previously  
2 had.

3 Next door, we have the Uniroyal building, which used  
4 to have four to five hundred employees. That's now sitting  
5 vacant. We had the Standard Products in Port Clinton,  
6 which had four to five hundred. Now vacant. We had the  
7 Celotex Quarry, which closed up last year, 150 employees.  
8 Last Friday, the Metaldyne Company, which is in the Erie  
9 Industrial Park closed, laying off approximately 80 to a  
10 hundred people.

11 This county has been consistently declared by the  
12 State of Ohio and the federal government to be a labor  
13 surplus county, entitling us to certain benefits in terms  
14 of tax credits and so on, but nevertheless, we are one of  
15 the few counties in the State of Ohio outside of Appalachia  
16 to be considered a labor surplus county.

17 Besides being the major employer in Ottawa County,  
18 one of the things that is fairly easy to understand is the  
19 taxes that the Davis-Besse pays to the school, the  
20 township, the county, and also we shouldn't forget the  
21 State of Ohio. It is also a major attraction of folks to  
22 utilize our seasonal or particularly especially when they  
23 have the, refueling in the nonsummer season, attracting  
24 people to utilize our hotels, motels, restaurants and other  
25 facilities.

1           It has, Carl has mentioned our EMA. It also  
2 provided, when I was County Commissioner, a facility in the  
3 courthouse, which although it's not the highest cost  
4 facility, it certainly represents an excellent facility  
5 that does us proud, not only with regard to Davis-Besse,  
6 with floods and tornados as well.

7           The radio system was mentioned. It was not  
8 mentioned that we, we have some roads in the area that  
9 because of flooding were built up by Davis-Besse, so that  
10 employees and emergency personnel could get to and from the  
11 plant, and the area.

12          It has not been mentioned that Davis-Besse has  
13 provided a great deal of environmental support for the  
14 area. That the wildlife is important to our area as a  
15 contributor of habitat to our bird migrations, the eagles  
16 and so on. This county relies very heavily upon the  
17 wildlife, the other things to bring folks in.

18          One of the concerns that some of my fellow  
19 Legislators had on occasion was, well, you know, why don't  
20 you go to wind power, why don't you go to coal, and so on.  
21 I'm not sure how many acres are in Ottawa County, but the  
22 estimate is that it would take 140,000 acres of windmills  
23 to replace Davis-Besse. And I'm not sure that we have  
24 that, that much acreage to spare in Ottawa County.

25          The obvious concern about coal is the other

1 pollutants that it produces, and we're spending  
2 considerable time, energy and expense now to try to  
3 mitigate that.

4 I'm also concerned about the cost of electricity and  
5 the capacity of our electric generation for the future.  
6 When I was in the Legislature, we were very careful not to  
7 duplicate California and its problems, which we had  
8 anticipated, but I am concerned about the year 2006, which  
9 will be the end of the market phase of deregulation in this  
10 area, and what this will do when we go to the marketplace  
11 and have true competition, as to what will be the price of  
12 electricity and whether there will be adequate supplies to  
13 take care of our needs.

14 Some of my fellow Legislators thought that gas  
15 peaking plants were the solution. They are not a long-term  
16 solution. The use of gas during already high consumption  
17 periods concerns me, especially since my gas bill is five  
18 times what my electric bill is, and we haven't had any  
19 peaking plants put on line in the area yet.

20 I'm also concerned and wondering about the national  
21 emergency. Those who oppose nuclear power constantly talk  
22 about terrorists attacking a nuclear power station. My  
23 concern after knowing the type of security that there is at  
24 the Davis-Besse Plant is not about terrorist activities  
25 there, as much as what happens if there is a terrorist

1 activity in one of our surrounding cities, and do we have  
2 the transmission line or transmission capability to provide  
3 electricity in that kind of situation.

4 My concern is that -- and I do want to commend the  
5 NRC, commend FirstEnergy, and other folks that are working  
6 on this particular issue. My concern is that we not get  
7 into a finger pointing issue, or an argument of a did too  
8 or did not, and that the plant closure not be delayed as a  
9 result of that type of activity.

10 I followed the progress of the various committees,  
11 and am certainly impressed with what has happened.

12 A question that I have is, we have a number of local  
13 business people and political leaders who were not able to  
14 be here today. For example, the Mayor of Port Clinton  
15 called and said that he had a council meeting this  
16 evening. My question is, can the meeting feedback form be  
17 used by folks to make comments to the NRC without  
18 necessarily being present at the meeting?

19 MR. GROBE: Absolutely.

20 Thank you. You're an excellent segue. In addition to  
21 these cards, if you have a comment, we also have meeting  
22 feedback forms. You don't even have to put a stamp on  
23 them. Just fill them out and send them back to us and they  
24 get right back to my desk.

25 MR. OPFER: Thank you.

1           MR. GROBE:        As well as a  
2 number of other people.

3           MR. OPFER:        I appreciate that,  
4 Jack, and I do have some emails, copies of emails that I've  
5 received from local business and political leaders, and  
6 will present those this evening, if that is acceptable.

7           MR. GROBE:        That would be  
8 very good. Thank you.

9           MR. OPFER:        Thank you.

10          MS. LIPA:         The other thing I  
11 would like to offer too, Jack, is on the back page of the  
12 NRC newsletter is the email address and phone numbers and  
13 names of our Public Affairs Officer. So, you can also  
14 email questions to us at this email address on the back  
15 page.

16          MR. GROBE:        Very good. Are  
17 there any other local elected officials or representatives  
18 that are here this afternoon?

19          I would now like to open the floor to any local  
20 residents, members of the public from the local area. The  
21 rest of you are just dedicated listeners?

22          Yes, ma'am.

23          MS. LINCOLN:       My name is Connie  
24 Lincoln and I'm a contractor at Davis-Besse. And I have a  
25 question. I think what, I've gone to all the hearings and

1 heard different things and you clearly see today that we're  
2 really on the road to recovery, and people are feeling  
3 pretty enthusiastic, feeling good about where we are. You  
4 can see the curves are turning down. We're getting the  
5 work done. So, we're sort of at a pivotal point.

6 So, I think about it, and I think in your shoes, you  
7 have the keys to the plant. And you also are taking a look  
8 at it, hopefully from a bigger look and a strategic  
9 viewpoint on what has happened.

10 So, in sitting back and looking at it from the  
11 bigger picture, what I ask you is what haven't you heard  
12 that you want to hear from Davis-Besse, and is there any  
13 showstoppers that you see that we need to be thinking  
14 about?

15 MR. GROBE: Excellent  
16 questions. I'll make a couple of comments and I'll let  
17 Bill think and see if he has some thoughts that he wants to  
18 add.

19 First off, we don't have the keys to the plant. Lew  
20 Myers has the keys to the plant. And they've always been  
21 with him.

22 We're observing, we're your representatives, making  
23 sure when this plant restarts, it can restart safely, and  
24 also that safe operation could be sustained for the long  
25 run.



1 I think there is two areas that are of continuing  
2 concern, but before I say that, let me step back. The  
3 tenor of the meeting and nature of the comments this  
4 evening has been interesting to me, because I haven't seen  
5 a whole lot of difference in this meeting than I've seen  
6 over the last several meetings. Each meeting there has  
7 been steady progress. Each meeting there has been  
8 demonstration of what I call the right stuff, over the last  
9 three or four months.

10 Just because those curves have peaked. Those of you  
11 who go over and study those curves closely will notice that  
12 some of those curves feed other curves, so as one goes down  
13 the other goes up. That's good news. It means discovery  
14 is beginning to come to an end and resources can be shifted  
15 to fixing the problems that have been identified.

16 There is still a substantial amount of work to be  
17 done. Just bulk work. That's one area of focus that I  
18 have.

19 Second area of focus is the design issues. That's  
20 an important outstanding question. Discovery is not done  
21 in that area.

22 And the third area is the one that Bill mentioned  
23 earlier, and that's the Safety Culture and Safety Conscious  
24 Work Environment at the plant. It wasn't any of these  
25 hardware issues that caused the head to corrode for four to

1 six years and not be identified. The indicators were  
2 clear. It was the safety culture of the plant that caused  
3 that to happen. And we need to make sure that we get our  
4 arms firmly around understanding FirstEnergy's view of that  
5 safety culture and how it's been changed.

6 There is a lot of expertise out there that can  
7 provide assistance in measuring the safety culture. And  
8 lots of times people think that that's not something you  
9 can measure because it's, it's not, as most of us engineers  
10 relate to, it's not something I can put a calculator on or  
11 use a micrometer on or anything like that, but there are  
12 indicators that you can develop and monitor safety  
13 performance.

14 So, those are my thoughts.

15 Did you have anything you wanted to add?

16 MR. DEAN: Yeah, what I  
17 wanted to add, two things I guess. One is, plants that  
18 find themselves in this situation where they're in an  
19 extended outage due to notable performance issues and a  
20 significant type of event that occurred here, there is a  
21 definitive life cycle.

22 Both Jack and I have had experience with other  
23 plants that have gone through similar sort of evolutions.  
24 And I don't disagree with you. I think I made the point  
25 during the presentation, that looking at those curves, that

1 is a milestone along the way. But I think as you heard  
2 Jack say, there is a lot of work that needs to be done.  
3 First of all, you know, we have to get a sense for,  
4 you know, you asked, what are the things we need to see.  
5 Okay. We've got to get a sense for, in toto, what is the  
6 significance of the issues that are on the plate now in  
7 terms of, you know, is there a collective significance to  
8 that and what has to be done to ameliorate that collective  
9 significance, so we have a comfort level that the plant has  
10 addressed those issues at least from a hardware perspective  
11 that support safe restart.

12 I applaud the Licensee for taking on some mobile  
13 modifications and, that are not associated with the vessel  
14 head degradation. I think you heard Lew talk about some  
15 today. We talked about others in the past, you know. And  
16 so that's the type of indications that we want to see that  
17 maybe get towards more the safety culture. Okay. What is  
18 the approach that the plant is going to take relative to  
19 the application of its resources, the use of its capital  
20 investments, in terms of making the plant safe or making it  
21 robust and making it capable of being able to operate on an  
22 ongoing basis safely.

23 Okay. Those are the things, the demonstrations we  
24 have to see. We are only seeing, what have they done to  
25 identify issues. Now we have to see them resolve these

1 issues, we've got to see them more importantly resolve  
2 those issues related to, I want to get this place, in its  
3 place to begin with, which gets to the safety culture  
4 issue.

5 And that's going to be a challenge area. It's going  
6 to take some sort of qualitative assessment. And, to be  
7 honest with you, those issues are not going to be resolved  
8 if and when the plant restarts. Okay. Those are going to  
9 be long term issues that going to need to be addressed and  
10 monitored for a period of time.

11 MS. LINCOLN: Thanks.

12 MR. GROBE: Okay, thank you  
13 very much. Excellent question.

14 Floor is open. Anyone here that's not a local  
15 resident or worker at the plant that has a question or  
16 comment?

17 MR. DEAN: We have another  
18 floor show at 7.

19 MR. GROBE: I don't know if  
20 you heard that. Bill said, we have another floor show at  
21 7. And we do. Those of you that have additional questions  
22 that you think of over dinner are welcome back at 7:00.

23 I just want to make one final observation. As Bill  
24 indicated, he was associated with the Millstone facility  
25 and the restart effort there, and I've been associated with

1 a number of restart efforts. And most of those took  
2 years.

3 And, one of the differences that I see at  
4 Davis-Besse is that they brought in a strong management  
5 team with a good focus. And that doesn't solve the  
6 problem, but that allows the problem to be, problem  
7 resolution to begin. And, that was done very early on.

8 We're eight months into this, nine months into this,  
9 something like that. And, as I said, you've seen steady  
10 progress over the last several months. I think that's  
11 noble. Restart is not going to be next month. But there  
12 is steady progress being made, and I guess I'll close with  
13 that.

14 Thank you very much.

15 (Off the record.)

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1 CERTIFICATE

2 I, Marie B. Fresch, Registered Merit Reporter and  
3 Notary Public in and for the State of Ohio, duly  
4 commissioned and qualified therein, do hereby certify that  
5 the foregoing is a true and correct transcript of the  
6 proceedings as taken by me and that I was present during  
7 all of said proceedings.

8 IN WITNESS WHEREOF, I have hereunto set my hand and  
9 affixed my seal of office at Norwalk, Ohio, on this 16th  
10 day of December, 2002.

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Marie B. Fresch, RMR

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NOTARY PUBLIC, STATE OF OHIO  
My Commission Expires 10-9-03.

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