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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, September 17, 2002, at  
2:00 p.m. at the Oak Harbor High School, 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
- Mr. John Grobe, Chairman, MC 0350 Panel
- William Dean, Vice Chairman, MC 0350 Panel
- Anthony Mendiola,  
Section Chief PDIII-2, NRR
- Christine Lipa, Projects Branch Chief
- Douglas Simpkins, NRC Resident Inspector
- Scott Thomas, Senior Resident Inspector  
at Davis-Besse
- 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
- Clark Price, Manager - Business Services
- Michael Stevens  
Director - Work Management
- Michael Roder, Manager - Operations

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1           MR. GROBE:           Good afternoon.  
2   Why don't we get started. My name is Jack Grobe. I'm the  
3   Chairman of the Davis-Besse Overview Panel. It's a special  
4   NRC panel that the NRC has chartered to provide oversight  
5   of the Davis-Besse facility during this extended shutdown  
6   situation.

7           This is a continuing, continuation of our regular  
8   meetings. These meetings are publicly observable. Purpose  
9   of the meeting is to discuss with FirstEnergy the status of  
10  the project at Davis-Besse and to provide feedback that we  
11  might have.

12          The agenda is up on the screen. Before we get  
13  started, let me take a moment and introduce the NRC staff,  
14  and then we'll ask FirstEnergy to introduce their staff.

15          On my far left is Scott Thomas, Scott is a Senior  
16  Resident Inspector at Davis-Besse. He inspects at the  
17  facility every day; lives in the local community here.

18          Next to him is Tony Mendiola. Tony is the  
19  Supervisor of Licensing Activities in the NRC Headquarters  
20  Office, responsible for the Davis-Besse project.

21          On my immediate left is Bill Dean. Bill Dean is the  
22  Deputy Director of the Division of Engineering in our  
23  Headquarters Office, as well as the Vice Chairman of this  
24  panel.

25          On my immediate right is Christine Lipa. Christine

1 is Branch Chief in the Region 3 Office in Chicago,  
2 responsible for Davis-Besse.

3 We also have Doug Simpkins, who is operating the  
4 overhead right now and he'll be joining us at the table in  
5 a moment. Doug is the Resident Inspector at the  
6 Davis-Besse facility for the NRC.

7 And in the audience, there is two NRC staff, Jan  
8 Strasma. Jan raise your hand. Jan is our Public Affairs  
9 Officer out of the Region 3 Office. And also Rolland  
10 Lickus, and Roland is a our State and Government Affairs  
11 Officer. And they're also here to answer any questions you  
12 might have.

13 There is a number of handouts in the foyer,  
14 including a monthly public report that the NRC is issuing  
15 on the status of the Davis-Besse project. A copy of the  
16 handouts, the agenda and handouts that we're going to be  
17 using today as well as a copy of the Licensee's handouts.

18 There is a couple other things I would like to bring  
19 to your attention. The NRC is always looking for  
20 feedback. There is a one-page feedback form. You don't  
21 even have to put 34 cents on it. Just fold it up and send  
22 it back to us with any comments you might have for and  
23 including the format and content of our meeting here  
24 today. Please take an opportunity to fill that out. We're  
25 always looking for opportunities to improve.

1 Lew, would you like to introduce your staff?

2 MR. MYERS: Yes, thank you  
3 very much. To our far left we have Clark Price. Clark is  
4 one of our Building Blocks, Review Process, and Return to  
5 Service Process.

6 Next to him is Bob Schrauder. Bob is in charge of  
7 Support Services Director at our plant. Additionally, he's  
8 been lead Project Manager for Head Restoration.

9 Jim Powers is next to me. Jim is our Director of  
10 Engineering.

11 Randy Fast, our General Manager of Operations, Plant  
12 Manager.

13 Mike Stevens, next to him. This is the first time  
14 that Mike has been here with us. Mike came to us with a  
15 broad base of experience from energy plants and Excelon  
16 plants, and has been with First Energy for several years  
17 now. Brought him over as Director of Maintenance, Work  
18 Control, if you will. So, he's with us today. This is his  
19 first time up here.

20 Then Mike Roder is also with us today. He's the  
21 Manager of Operations. He's going to talk about our  
22 Restart Plan, if you will. Okay.

23 MR. GROBE: Okay, very good,  
24 thank you.

25 I would now like to ask if there is any

1 representatives of, local public officials or if we have  
2 local officials here, I would like to ask them to stand up  
3 and introduce themselves.

4 MR. KOEBEL: Carl Koebel,  
5 Ottawa County Commissioner.

6 MR. GROBE: Thank you, Carl.  
7 Anybody else? Okay. Very good.

8 Our agenda today is very simple. It's the same  
9 agenda we use for each of these meetings. I'm going to ask  
10 Christine Lipa in a moment to give a very brief summary of  
11 our very last public meeting, and present a little bit of  
12 background information on the status of NRC activities.

13 After that, we'll turn it over to the Licensee for  
14 their presentation and certainly questions from the NRC  
15 staff here.

16 At the end of our business portion of the meeting  
17 today, we'll adjourn briefly, and then reconvene for an  
18 opportunity for members of the public to ask questions and  
19 provide comments.

20 Christine?

21 MS. LIPA: Okay. Thank you.

22 The next slide. This shows the Building Blocks that we  
23 talked about at the last public meeting, which was held on  
24 August 20. We did cover most of the Building Blocks during  
25 that meeting, but not all of them. And, the Licensee gave

1 us an explanation of the current status of the ongoing work  
2 in these areas.

3 We also heard from Bill Pearce, the Vice President  
4 of Nuclear Oversight on his assessment of QA's role. And  
5 during that meeting, the NRC folks presented some recent  
6 results of NRC inspections, including the AIT Follow-up  
7 Inspection and the Containment Extended Condition.

8 One of those inspection reports has been issued, The  
9 Extended Condition, and it will be available on our  
10 website. And the plan is as each of these inspection  
11 reports is issued, they will become available on the  
12 website, and available in ADAMS.

13 And the rest of the discussion at the August 20  
14 meeting is available on our website at the transcript  
15 that's been posted.

16 Next on the agenda is the NRC Restart Checklist, and  
17 this was issued in August, so it hasn't changed since it  
18 was issued. And, I won't go through all the items, but the  
19 purpose is to ensure common understanding of the specific  
20 activities that will need to be corrected and reviewed  
21 before restart. And this will be a living document, and if  
22 it's updated we will brief you on that at future meetings.

23 And then another item is the status of NRC  
24 inspections. I mentioned we completed two inspections; an  
25 AIT Follow-up and the Containment Extended Condition. And

1 right now, there are five inspections that are ongoing.  
2 The Vessel Head Replacement Inspection is ongoing, the  
3 Containment Extent Condition Part Two is ongoing. There is  
4 also a Program Effectiveness that started last week and  
5 that will continue on. Also starting last week was  
6 Management and Human Performance Inspection; and that will  
7 be ongoing for several more weeks. And then finally,  
8 System Health Inspections has started.

9 And then just to let you know some other items in  
10 your handout today, are the agendas that we'll be using for  
11 tonight's meeting at 7 p.m. and tomorrow morning at 9 a.m.  
12 at the Davis-Besse Administration Building, we'll be having  
13 another public meeting.

14 So, those agendas are in your handout.

15 That's all I have.

16 MR. GROBE: Okay. Let me  
17 just expand a little bit on the meetings, because it's, our  
18 schedule of meetings is a little different this month than  
19 it has been in prior months.

20 On August 15th in a public meeting, the Licensee  
21 FirstEnergy presented to us what they believed were the  
22 root causes of the problem that occurred at Davis-Besse in  
23 the area of organizational effectiveness, and that involves  
24 management, programs, processes and human performance.

25 Tomorrow, since August 15th they've completed their

1 Corrective Action Plan to address those causative factors.  
2 That discussion would be fairly extensive. I plan on  
3 having a fairly extensive discussion tomorrow on that. It  
4 would have dominated this meeting and prevented us from  
5 having thorough broad base dialogue of what's going on at  
6 the plant. So, we decided to schedule a separate meeting.

7 That meeting, like Christina indicated, is tomorrow  
8 at 9:00 in the morning. In an effort to not be too  
9 disruptive to the school activities, we're holding that  
10 meeting at the Davis-Besse Administration Building, which  
11 is on Route 2.

12 So, as I indicated, that is a public meeting and  
13 you're welcome to attend that if you so desire.

14 Lew?

15 MR. MYERS: Thank you.

16 Our agenda is changed somewhat today. We have  
17 several desired outcomes. First, we want to demonstrate  
18 Davis-Besse is making good progress towards restart. And  
19 we wanted to discuss our resolve and identify and fix any  
20 problems in doing the job correctly the first time.

21 To that, Mike Stevens will provide you information  
22 on the schedule and our milestones and also some of the  
23 quality problems that we are having from time to time.

24 We will discuss the major restart items. Mike  
25 Stevens will do that. And our integrated schedule, will be



1 the first time we discussed that at this meeting.

2 Finally, there is some updates we would like to  
3 provide you, been in the favor of recent events with the  
4 old head inspections. We'll do that today. Jim Powers  
5 will do that.

6 We'll try to provide you with some updates on some  
7 of the Building Blocks, the System Reviews which are  
8 through our discovery phase now, and the program reviews.

9 And then Clark Price will provide you information on  
10 performance indicators today and what you sort of see  
11 there, the discovery is beginning to level off. And that's  
12 a good indicator for us.

13 Then finally Mike Roder for the first time will talk  
14 about our Integrated Restart Plan and how we plan on  
15 approaching restart of the plant.

16 With that, I'll turn it over to Mike Stevens.

17 MR. STEVENS: Thank you  
18 Lew.

19 Can you all hear me okay? Not too good? How about  
20 now? Okay.

21 I'm Mike Stevens. I'm the Director of Maintenance  
22 at Davis-Besse. I've got about 20 years experience in  
23 nuclear power, both in engineering and maintenance. I've  
24 worked with Intergy, Excelon at the Perry Nuclear Power  
25 Plant, as Lew said, here at Davis-Besse now.

1       What I would like to discuss this afternoon is our  
2 recovery plans and the schedule that supports recovery at  
3 Davis-Besse. We've taken our schedule and incorporated  
4 into it not only the work activities for restoring plant  
5 equipment, but also our program reviews, our NRC Checklist  
6 items; and additionally major work activities that this  
7 management team wants to complete prior to start,  
8 restarting Davis-Besse.

9       With that I would like to talk about the milestones  
10 some, if I could. The first one is Restore the Containment  
11 Vessel and the Shield Building. What that milestone is, is  
12 to weld back the containment plate and pour the concrete  
13 after assembling all the rebar to reestablish the  
14 containment vessel itself.

15       There has been a lot of activities going on here.  
16 We're currently setting the opening in place, making preps  
17 for welding that. We've qualified the concrete to repour  
18 that containment vessel. That entailed mocking up the time  
19 it would take to go from the batch plant to the station.  
20 We've had concrete trucks driving around the area for about  
21 70 minutes simulating that. Then we poured the concrete,  
22 test it, to ensure it's of the right quality and meets the  
23 specifications.

24       Then you can see we have our System Health Readiness  
25 Reviews, our Latent Issues Reviews. The Latent Issues and

1 the System Health Reviews are centered around reviewing our  
2 plant systems to make sure that they're ready to perform as  
3 designed from a readiness to start the plant up.

4 The Latent Issues Review looks at the longstanding  
5 problems that may have been recurring, and we want to  
6 identify those to get those corrected as appropriate.

7 We have a milestone for FENOC Decision Making  
8 procedure to be implemented.

9 We have the Containment Extent of Condition  
10 Inspections and Evaluations. That's from the activities  
11 where we expanded the containment, initial inspections into  
12 the overall health of containment.

13 Then we have the Regulatory Compliance Program to be  
14 implemented. We'll complete our Program Reviews. And  
15 we'll implement Conduct of Operations Policy effectively.

16 Next slide.

17 Some of the more major milestones lead up to Core  
18 Reload, on or around October the 30th. I say that for a  
19 couple reasons. As we've laid out our schedule and our  
20 plans and integrated that altogether, and are executing  
21 that work, we're finding as we provide oversight and  
22 inspect how the work is going that there is certain times  
23 it's more appropriate to stop the work, revisit the  
24 standards, ensure that the quality of the work meets the  
25 highest standards. And we've had to do that on a couple of

1 occasions.

2 Most recently, I stopped the work associated with  
3 upgrading our polar crane, because it didn't meet the high  
4 standards for performance as well as return to service.

5 That's having an impact on some of the milestones.  
6 I'll tell you, that milestone looks like it's on track for  
7 October the 30th, but our containment vessel closure, even  
8 though we're to the point of welding it up, it's about a  
9 week to two weeks behind what we originally planned.

10 So, our schedule is sending a message, that I'm  
11 sending to the folks and this management team is holding  
12 its support to make sure that the job is done correctly and  
13 if it's not, we'll take the time to get it done correctly,  
14 and of high quality.

15 The next milestone is Implement Corrective Action  
16 Programs and Systems Reviews; get our new reactor vessel  
17 head on the reactor; and enter Mode 5, November the 3rd.

18 Now, that Mode 5, means the reactor vessel head, the  
19 new one is installed on the reactor with all the bolts  
20 tightened. It's the final closure of the reactor vessel  
21 itself. Then we will fill the Reactor Coolant System and  
22 vent it, and do an extensive review of the restart  
23 readiness for the plant.

24 What that entails is revisiting all of the  
25 activities we put in place, inspection of those activities,

1 and as well as the paperwork and the documentation from the  
2 reviews.

3 When we're satisfied that we're ready for restart,  
4 we'll enter Mode 4 on November the 19th. Mode 4 is an  
5 important milestone, because that's when we'll establish  
6 the containment, and be ready to heat up the reactor  
7 nonnuclear, to normal operating pressure and temperature,  
8 which is what we call Mode 3.

9 The next slide.

10 Once we get to that point, without having the  
11 reactor critical, we're going to do a full pressure  
12 containment inspection of the reactor coolant system and  
13 associated piping, to make sure that it is intact and  
14 leakfree.

15 We want to do that to revalidate what we know from  
16 the work activities we perform as well as assure ourselves  
17 there is no other unknowns there.

18 Then we will go to our Restart Overview Panel and  
19 ask them for recommendation. If they recommend restart,  
20 we'll be asking the NRC for approval on or around November  
21 the 18th.

22 Then, we'll enter Mode 2, which is currently set for  
23 December the 4th, and that's actually starting the reactor  
24 up leading to a hundred percent power, December the 7th.

25 MR. GROBE: Mike, before you

1 go on, just two questions that I have. On your first  
2 slide, your last bullet, you talked about conduct of  
3 operations effectively implemented. Were you going to talk  
4 more about that today?

5 MR. STEVENS: Mike has a portion  
6 of that in his presentation.

7 MR. GROBE: Okay, good. And  
8 then, in discussing Core Reload, you talked a little about  
9 the polar crane. Could you get into a little more detail  
10 on that; what you found and why that occurred?

11 MR. STEVENS: Okay. We --  
12 everybody hear the question okay? He's asking about the  
13 polar crane.

14 Polar crane is a pretty good size crane we have in  
15 our containment vessel that we use to disassemble and  
16 reassemble the reactor. While we were down, we took the  
17 opportunity to upgrade that polar crane and install new  
18 motors, new electrical panels, new controls, to improve its  
19 reliability when it's in service to be used.

20 We had taken a look at that work that was performed,  
21 and I went over and looked at the polar crane and I wasn't  
22 satisfied that we had taken all the tools off the polar  
23 crane that we could have, and clean it of some of the  
24 leftover debris from putting it, putting those cabinets and  
25 stuff up there. We had some minor metal shavings, but that

1 was unacceptable. We had some screws missing in some  
2 panels.

3 Later on, we're going to be able to meet the perform  
4 maintenance on that polar crane. When we went to look at  
5 the wiring, we had to label all the wires like we should,  
6 so we could trace them out later during the construction.  
7 And we didn't set the upper and lower limits on the hook.  
8 There was backup limits for that, that would physically  
9 interfere with moving the polar crane. But there is gear  
10 limits, so that we don't challenge those backup limits.

11 I took a look at that. I had the electricians in  
12 the maintenance shop go up and look at it. There were some  
13 light bulbs out on the polar crane. Our procedure for  
14 checking out the polar crane is check those light bulbs,  
15 make sure they were in good working order. They weren't.

16 We had a couple broken globes that protect light  
17 bulbs that weren't in place. We didn't want to put it in  
18 service like that.

19 MR. GROBE: The issue  
20 regarding wiring and the limits on movement of the crane  
21 hook; were those part of a, is this a maintenance work  
22 order or was this a modification that you were doing?

23 MR. STEVENS: Those were from a  
24 maintenance work order; they weren't part of the  
25 modification.

1           MR. GROBE:           How was it that  
2 these activities weren't caught in your post-maintenance  
3 testing that's required and they had to be caught by you?

4           MR. STEVENS:        The post-  
5 maintenance testing for the modification was performed. It  
6 was performed satisfactory. It did not include adjusting  
7 those limits, or the lighting and some of the other  
8 activities. I think it goes to lack of understanding and a  
9 teachable moment of what the standard is from years of not  
10 attaining that standard.

11          MR. GROBE:           Should those  
12 checks have been included in the post-maintenance testing?  
13 Was that part of the maintenance activity?

14          MR. STEVENS:        I thought so.

15          MR. GROBE:           And these  
16 activities, as far as the maintenance were being completed,  
17 that was completed and signed off by your mechanics and  
18 electricians and then reviewed by the supervisor and it had  
19 gone through all its reviews and approvals?

20          MR. STEVENS:        No, we had a  
21 project manager using some outside contractor help; and I  
22 don't think they had, we had the appropriate supervision  
23 over those personnel to ensure that this work was performed  
24 to the correct standards.

25          MR. GROBE:           Okay. I think



1 it's great that you were in there and you took a look at it  
2 and asked questions, but I'm trying to understand what the  
3 root cause of this was, and what actions were necessary to  
4 address the root cause.

5 MR. STEVENS: Well, we  
6 documented that on a condition report, had the team taking  
7 a look at that. And what occurred here, as well as some of  
8 the other activities we stopped work on, to make sure that  
9 we understand and have the right level of supervision and  
10 oversight on these activities, because quite frankly, if we  
11 stop the work going back, these milestones won't be met.  
12 But we will do that to be sure the work is high quality and  
13 done correctly.

14 MR. GROBE: You indicated  
15 that this work was being performed by contract electricians  
16 and mechanics.

17 MR. STEVENS: Yeah. They were  
18 experts in the field of crane maintenance, and that's why  
19 we were utilizing them.

20 MR. GROBE: Did their training  
21 and qualifications meet your standards?

22 MR. STEVENS: No, and I took  
23 them out of the picture as far as actually working on plant  
24 equipment at this point, and I'm treating them as  
25 consultants. I have a good sense of the equipment and how

1 it operates and bring a lot of experience to the table in  
2 that regard. That's what we need for going forward.

3 We have qualified mechanics and electricians. We  
4 need to rely on our contract resource and that's why we're  
5 putting a team together, to make sure we're helping them be  
6 successful; making sure we're integrated with them going  
7 forward and they're working to the correct standards.

8 There is another piece of that, and that's the sense  
9 from some of the individuals, particularly one of the guys  
10 that was leading this project had a sense that the schedule  
11 was important. And he was hurrying through and made some  
12 decisions about not putting all the screws in the panel for  
13 future work and whatnot, not taking the time to correct the  
14 light bulbs. He was interested in meeting that scheduled  
15 date.

16 And if it's not right, we can't go forward. So,  
17 move the date, and we'll go get it right.

18 I think that takes a lot of courage. I think it has  
19 to be demonstrated, and taking a leadership role is what I  
20 was willing to change that to be. So, I think it's  
21 appropriate that I got involved, stepped up and did that;  
22 so that it's okay. I think at any rate it's not the end  
23 of the world, and we're getting the right stuff going  
24 forward. So, if there was any question in that individual  
25 or other individuals mind on how we're going to proceed,

1 that should be alleviated.

2 MR. MYERS: One of the other  
3 things also is, Mike is also a Director, so we're going  
4 into an added mode since the last meeting, so he is the  
5 Director. He's not really doing a function right now,  
6 Director of Maintenance, as much as Mike being that  
7 Director, so you would expect him to take these kind of  
8 actions.

9 MR. GROBE: You have a lot of  
10 contractors on site now doing a variety of work. How do  
11 you assure that the contractors come on site meet your  
12 standards as far as competencies and work quality  
13 standards?

14 MR. STEVENS: Well, there is a  
15 lot to that question. We go through quite a few ways.  
16 Many of the contract supervision that we use, we put them  
17 through training and we qualify them to our standards. If  
18 they don't meet that qualification, we don't let them  
19 supervise personnel.

20 For the majority of the building trades that come up  
21 out of the local union, most of those folks we know. For  
22 the other folks that come in that we don't know as well,  
23 haven't used before, we rely on the union hall and some of  
24 our key contractors to provide us with information about  
25 those individuals, and we try and pair them up with folks

1 that have been on the station before.

2 MR. MYERS: There is two  
3 things, specialty contractors, the crane mod, you know,  
4 we're not crane experts, and we work on our own and work  
5 maintenance, but you wouldn't come to us to buy a crane.  
6 So, we want to update this crane, we went to a crane  
7 vendor; well known crane vendor, who we saw their standard  
8 of workmanship in the field.

9 We're a customer. They work with cranes and bridges  
10 and everything else, but they're crane experts. And we  
11 brought some modifications from them.

12 So, contractor oversight here is a key part of  
13 this. We have an extreme situation, and we bring  
14 contractors in. There is a lot to manage there.

15 MR. GROBE: You mentioned the  
16 project manager that worked the schedule that may not have  
17 met your quality standards. Is that FirstEnergy's Project  
18 Manager?

19 MR. STEVENS: Yes.

20 MR. GROBE: What, how did that  
21 come about, that your oversight of this contractor's  
22 activities didn't ensure appropriate quality?

23 MR. STEVENS: I'm not sure I  
24 understand the question. How did my --

25 MR. GROBE: How did it come

1 to a situation, where you're depending on what should be a  
2 qualified contractor, accomplish work at an appropriate  
3 level of quality, but with some oversight, and your manager  
4 is one of the people that's providing that oversight, but  
5 he puts schedule ahead of quality; how did that come to be;  
6 what was it that caused him to do that, or her?

7 MR. STEVENS: I'm not sure I  
8 know what he was thinking there. We found that, I found  
9 that by going in and looking to validate, so I was sure and  
10 confident that I understood what that piece of equipment  
11 is; and followed up.

12 I don't know how else, it all goes back to  
13 management performance. Have employees working, you  
14 follow-up with what they're doing, provide feedback; ask  
15 what you can do to help them be successful, make sure they  
16 have the right resources.

17 And then you have to take a look at the work they're  
18 doing. If the work they're doing doesn't meet the  
19 standard, then you have to provide the leadership to get  
20 them up to the proper standard, and carry on.

21 Now, not everybody is not meeting the standard, but  
22 there are some.

23 MR. GROBE: This is truly  
24 good news, bad news story. I truly appreciate that you  
25 were in containment and provided some independent oversight

1 of this work, but of course, the bad news is that the  
2 contractors weren't performing at a quality standard and  
3 your people on the job weren't providing oversight to  
4 assure appropriate quality. They placed schedule ahead of  
5 quality.

6 Have you talked to other project managers after this  
7 situation?

8 MR. STEVENS: We certainly did;  
9 talked to project managers, talked to the shops. And like  
10 I said, we have a team put together of some of our more  
11 experienced people taking a look at what are, what are the  
12 circumstances surrounding this mark here, so that we don't  
13 make assumption and not get it. That's what we're doing.

14 MR. GROBE: Okay, how did you  
15 do that? Did you stop work and get all the project  
16 managers together and use this as a, you used the word,  
17 teachable moment?

18 MR. STEVENS: Through the work  
19 support center, which is a team of folks we have from each  
20 of the disciplines. We brought this problem up. We  
21 discussed what we needed to do. I have a strong project  
22 manager individual that's going, we just brought over from  
23 Perry, that's the Outage Manager. Also had Supervisor of  
24 Projects, where more critical projects are taken by that  
25 projects group per se.

1           Then we have, so I had them pull together. They  
2 know how to be successful in projects. We discussed where  
3 the shortcomings were. I reiterated to the Outage Team the  
4 need to perform in a quality manner, and take the time to  
5 do it right.

6           Last Friday, we had an all-hands meeting at the  
7 station. I gave a presentation to the power plant. Used  
8 this and a couple other examples; it's the right thing to  
9 do it right the first time. I don't have a whole lot of  
10 time to do it right more than once. You got to get it  
11 right the first time.

12          And changed the way during the outage meeting that I  
13 had set up previously, I believe. And at least that's the  
14 feedback I'm getting from some of the participants. We go  
15 around the room and ask them; what can I do to help you be  
16 successful; what concerns or problems are you having; and,  
17 flush out any other issues.

18          In addition to that, what the Work Support Center  
19 Team -- everybody know what that is? That's the  
20 maintenance guy, ops guy, engineering, the scheduler,  
21 safety, the containment manager.

22          We get those guys together and we're looking at the  
23 upcoming projects, and we're bringing the project managers  
24 in and being proactive to make sure we understand what  
25 their needs are, where they're at with their project and

1 what we can do to help them be successful, or maybe  
2 reschedule a couple activities that aren't critical in the  
3 chain to give them some more time to prepare and get  
4 ready.

5 MR. MYERS: We did work, we  
6 had a stand down for a couple days.

7 MR. STEVENS: Yeah, we still,  
8 that polar crane is not going back into service until I  
9 inspect it.

10 MR. MYERS: And, now with  
11 the crane, we're putting a hold on that, it knocks some  
12 other job off.

13 I would comment that we're not talking that the  
14 crane was falling apart or anything like that. The issues  
15 we're talking about, if you went to a normal-type business,  
16 you probably wouldn't find the little wires we're looking  
17 for; you wouldn't probably find a bolt out of a cabinet,  
18 but this doesn't meet our requirements, and we're trying to  
19 improve the requirements.

20 One of the good things we have now is, I think it's  
21 different than we've seen the past couple months, our  
22 directors are the Outage Directors. Mike is one of our  
23 directors in the past.

24 And I asked someone the other day at Davis-Besse,  
25 you know, how long have you been Outage Director. It was



1 one of the directors of the plant. He couldn't remember  
2 the last time.

3 So, it's setting new expectations and that's what  
4 we've got to do. So, when we talk about a schedule here,  
5 or to schedule, I don't think the schedule means everything  
6 is going to go perfect; not everything is going to go  
7 perfect. If we need to stop, we'll stop. And that's the  
8 main thing we need to do.

9 MR. GROBE: I think we spent  
10 enough time on this, but I just wanted to emphasize --  
11 okay, Tony, go ahead.

12 MR. MENDIOLA: I need to  
13 understand the timeline of moving the two heads; the old  
14 head out of containment and new head into containment; and  
15 the realization of the polar crane problems. Were they  
16 discovered after the heads were removed or prior to the  
17 heads removed or during the heads were removed?

18 MR. STEVENS: They were  
19 discovered after the heads were moved.

20 MR. MENDIOLA: By a walkdown of  
21 the crane after the heads were removed?

22 MR. STEVENS: Yes.

23 MR. MYERS: You know, you  
24 don't understand. We tested that crane, did a load test  
25 and everything else, for our head move. We found on the

1 low limits, which is where we were going down to the very  
2 bottom of the containment, we found the crane hook; this is  
3 a massive hook on the side, and we found a problem there  
4 and that's when we started checking the limits and all. We  
5 totally tested the crane to make sure it was fine; we moved  
6 loads and everything else before that, you know.

7 MR. MENDIOLA: My reaction to  
8 that quite clearly is some of the stuff that you've  
9 indicated that you're modifying and correcting with the  
10 maintenance work order was stuff, if you will, that was  
11 already there, if you will, when you used the crane, rather  
12 than occurred after the crane is used to move the heads.

13 MR. MYERS: That's correct.  
14 That's correct.

15 MR. STEVENS: It goes to minimum  
16 compliance, the crane tested fine. You go to the panel and  
17 there is a dozen bolts to hold the panel on, and five of  
18 them are missing, that's not right.

19 MR. MENDIOLA: I understand what  
20 you're saying. You have to understand that I can't  
21 rationalize, you're indicating to me now that you can't use  
22 the crane because of its current status, but you were using  
23 crane.

24 MR. STEVENS: I understand. I  
25 said I took it out of service so that we could get it

1 completed and correct. That's all.

2 MR. MYERS: We could probably  
3 make a management decision to use that crane in the state  
4 it's in right now, but it's not correct, it's not the  
5 standard you would look for. That crane would work fine.

6 MR. MENDIOLA: So, you hold that  
7 the crane is currently in compliance and you're just  
8 improving it; is that the, is that your current view of the  
9 crane?

10 MR. STEVENS: I think the crane  
11 is in compliance, minimum compliance. I think per ANSI  
12 standards, we performed the inspection on the hook lock and  
13 wire rope and what's required, it would probably meet  
14 that.

15 MR. MYERS: Absolutely.

16 MR. STEVENS: I don't think  
17 that's the way a crane should be operated, and I've got  
18 some, I'm not the only one; I mean, other people know or  
19 will know or will come to learn that that's what's in  
20 place, and that's not the right standard for performing  
21 work at the station. And we are finding and using those  
22 types of work activities to raise the standard beyond what  
23 the minimum procedure requirement is.

24 MR. MYERS: Once again, we  
25 have a team doing detail investigation. And once we get

1 that done, we can share more information with you, but  
2 right now, you know, I don't know of anything that would  
3 say that crane was unsafe in any way. I don't know of any.  
4 It could come to light, but I don't know it now.

5 MR. GROBE: The, I just  
6 wanted to wrap up this topic by simply observing that the  
7 quality of the work being performed by the folks at the  
8 working level and the emphasis of schedule over quality are  
9 two of the issues we are going to be discussing tomorrow  
10 morning; and it's clear that, at least at this one work  
11 activity that you haven't adequately addressed those  
12 issues.

13 And there is a lot of work going on at the site and  
14 I'm glad to hear that you've stood down and had an  
15 opportunity to talk with everybody about your  
16 expectations. It's critical that those expectations come  
17 to life in the plant. And, these kinds of behaviors that  
18 resulted in this, fortunately, Mike, you were in the plant  
19 and you observed these activities, need to change.

20 MR. MYERS: We have 1,300  
21 contractors inside now. You're right, there is a lot of  
22 work going on. And we need to stop this. This does not  
23 set the standard.

24 As we finish our investigation more and more, we'll  
25 share that with you. This rigorous standard is what we

1 want as a working standard. This provides the workmanship  
2 that we like, you know, going on.

3 MR. GROBE: Okay.

4 MR. THOMAS: Can I just ask a  
5 question?

6 MR. GROBE: Go ahead.

7 MR. THOMAS: Just along the  
8 same lines, you said you had a large number of contractors  
9 on site. Do you feel you have an adequate staff to enforce  
10 your expectations to, Davis-Besse expectations on these  
11 contractors while they're working on the system?

12 MR. MYERS: You know, that's  
13 a hard question. I have to answer that every day. You  
14 know, something we should be concerned with, but at this  
15 time, I don't see that being a major issue. In fact, what  
16 I anticipate is staffing should be reduced in the future,  
17 because, we're in the startup phase now; all the system  
18 reviews, all the steps getting done. So, I would look for  
19 the total number of staff, contractor staff reduced by this  
20 time next month.

21 I don't think we have a serious problem right  
22 now, but we're at our limit, 1,300 contractors is a lot of  
23 contractors.

24 MR. GROBE: Okay, thank you.

25 MS. LIPA: I have one more

1 question before we go on, Mike.

2 On this very slide, you show Core Reload October 30,  
3 and then a couple bullets down entering Mode 5 on November  
4 3th. The second bullet on the page is very important.  
5 Corrective Actions for Program and System Reviews  
6 Implemented. It's my understanding that those reviews are  
7 still ongoing now and all the corrective actions have not  
8 yet been determined. So, what's your window for completing  
9 your reviews and starting your implementation of those  
10 corrective actions to get them all done by November 3rd?

11 MR. MYERS: We'll talk about  
12 that tomorrow.

13 MS. LIPA: This is the  
14 Program and System Reviews.

15 MR. MYERS: A lot, the big  
16 one is Corrective Action Program. That is on our agenda  
17 tomorrow, is Corrective Action tomorrow, so we'll spend  
18 quite a bit of time on that program tomorrow.

19 MS. LIPA: Okay. We'll talk  
20 about it tomorrow.

21 MR. GROBE: Okay.

22 MR. STEVENS: Any other  
23 questions on this?

24 Let's go to the next slide.

25 Here's the NRC Restart Checklist items that we have

1 integrated into our schedules. I just put the bullets up  
2 there.

3 The next slide.

4 Here's some of our current work activities. Some of  
5 the big ones we felt were important, wanted to share with  
6 you in addition. We have the Reactor Coolant System Hot  
7 Leg Thermowell Repair. Cut those old thermowells out, weld  
8 new ones in. That's been a recurring problem for us.

9 We're going to upgrade the Containment Emergency  
10 Sump; make it almost 30 times bigger than it is now as far  
11 as square foot opening goes. That will improve the safety  
12 margin at the station.

13 We have a, major work activities for coatings inside  
14 the containment. 40,000 square foot dome in containment is  
15 being stripped of its paint and being recoated, as well as  
16 some of the other areas in the containment, like the flood  
17 tank and clean air grooves.

18 The Safety System Performance capability --

19 MR. GROBE: Mike, let me  
20 interrupt you just for a moment. Could you talk a little  
21 more about the containment sump and what you found when you  
22 inspected that, and the relationship between that issue and  
23 containment coatings.

24 MR. STEVENS: Jim is going to  
25 talk more about the technical side of the emergency sump in

1 his presentation.

2 MR. GROBE: Okay.

3 MR. STEVENS: So, from a work  
4 standpoint, we're going to add a great deal of square feet  
5 to that surface structure. Work entails some of the  
6 undervessel area, as well as repairing some of the area by  
7 the decay heat pit. There's pretty extensive amount of  
8 work in the containment to make that modification.

9 MR. GROBE: Okay. We'll be  
10 patient then for Jim.

11 MR. STEVENS: The Safety System  
12 Design Performance Capabilities, with the Service Water  
13 System, the High Pressure Injection System and the 4160  
14 Volt Electrical Distribution System.

15 We are recoating our main condenser, although it's  
16 not a safety system, it's on the secondary side; and we're  
17 doing that to prevent any leakage at our condenser.

18 We're going to upgrade and modify our Emergency  
19 Diesel Generator Air Start System. A couple things that  
20 does for us, is it relieves the maintenance department of  
21 some recurring maintenance. Gets some components that we  
22 don't think are as reliable as they'd like them to be out  
23 of the system, as well as improves the capability of  
24 them, of the air start.

25 MR. GROBE: I also had a



1 question about service water system and particularly  
2 service water supplied in containment air coolers; is that  
3 also on your agenda, Jim?

4 MR. POWERS: I could touch on  
5 that, Jack.

6 MR. GROBE: Okay.

7 MR. THOMAS: What's the date  
8 these activities will be complete prior to restart?

9 MR. STEVENS: We're intending  
10 for all these to be completed prior to restart. We're  
11 driving to make the plans to that effect.

12 MR. THOMAS: Cutting the  
13 restart amount?

14 MR. STEVENS: Only, the only  
15 uncertainty there is whether or not the manufacturer is  
16 making the receiver tank for us, but preliminary it looks  
17 like it can, and looks like it fits in our schedule.

18 MR. MYERS: As a minimum,  
19 we'll get the dryers in.

20 MR. STEVENS: We have our high  
21 pressure Feedwater 1-6. We're replacing the pumps in it.  
22 We've elected to take two of the reactor coolant pumps out  
23 of service. We're going to take the impellers out of them,  
24 totally refurbish them and take motors, or put new motors  
25 on the reactor coolant pumps.

1       Talked a little about the Polar Crane Reliability  
2 Upgrades.

3       We're going to install a permanent seal for the  
4 reactor cavity.

5               MR. MYERS:           That's a major  
6 project too, the cavity seal.

7               MR. STEVENS:        We have the two  
8 valves in the decay heat pit. We want to resolve the  
9 leakage into the decay heat pit, make sure there isn't  
10 any. We're going to make a modification to that and  
11 provide a good seal.

12       We've included all the Operator Workarounds,  
13 Temporary Modifications, so our intention is not to have any  
14 of those when we start up.

15       With that, I would like to ask if there is any more  
16 questions?

17               MR. MYERS:           I think it's  
18 important, none of these things, feedwater pumps or the  
19 reactor pumps; the cavity seal would prevent any -- the  
20 plant came with original temporary seal, a seal which you--  
21 (Requested speaker to repeat.)

22               MR. MYERS:           Cavity seals, like  
23 installing the other pressurized water reactor. And, you  
24 know, those are the pretty big mods that we're making to  
25 include an overall margin of safety and reliability of our

1 plant. So, we're pleased with that list.

2 MR. DEAN: I have a couple  
3 questions. First, going back to the discussion of restart  
4 milestones. I think you're all aware that historically  
5 plants that are in the O350 process, extended shutdowns,  
6 historically, there is a pattern of slippage as things  
7 emerge. We've discussed the polar crane is going to be an  
8 example. I heard you all talk about that today. Your  
9 intent is to make sure you're doing things right, and if  
10 that results in schedule slips, so be it. You want to do  
11 things the right way.

12 In terms of then the dates you've established here,  
13 and I particularly note one where it says, we are entering  
14 Mode 4 on November 19th, and then Full Pressure Containment  
15 Inspections entering Mode 3. Then you have NRC approval  
16 for restart November 18th.

17 I think it would be unlikely for us to provide  
18 approval for restart until we have an opportunity to see  
19 things like, you know, did the system hold LP and LT. So,  
20 I'm guess I'm trying to point out there is some  
21 discontinuities here already.

22 Given all that, in terms of confidence level and the  
23 types of things that you're seeing, just had a long  
24 discussion of the polar crane issue, revealing some of the  
25 things that led to the vessel head degradation, production

1 orientation, minimum compliance. So, clearly, you know,  
2 those are underlying issues that we're really interested in  
3 seeing resolved. Clearly you're not there yet.

4       Given all that, what's your confidence level in  
5 terms of these milestones?

6           MR. MYERS:           Let me sort of  
7 answer that. We spent a lot of time since the last  
8 meeting, in fact, we brought a copy of our schedule today.  
9 How many pages is it?

10          MR. STEVENS:        About 1,240.

11          MR. MYERS:        We have thousands  
12 of activities in there. You know, we're, from what we  
13 know, all boils down, and system reviews, that we've done,  
14 from hardware standpoint; we feel pretty comfortable in the  
15 range that we're talking about. We could be a few weeks  
16 off here and there, but generally, we believe we can get  
17 most of that work done. And we feel real good about it, as  
18 a matter of fact.

19          MR. DEAN:         So, your  
20 projections are based on physical work accomplishment.

21          MR. MYERS:        Physical work.  
22 And we do have, before a lot of management stuff,  
23 management reviews, all of the training that we plan; all  
24 that's loaded into the schedule also. So, it's really a  
25 totally integrated schedule. And it is a very, very

1 aggressive, it's an aggressive schedule.

2 But the quicker that we can take the plant to a  
3 point where the head is back on and we can pressurize up,  
4 and go around and look for leaks -- we're going to repack a  
5 hundred valves. So, you know, whenever you repack a  
6 hundred valves, you may have some leakage from some of the  
7 repacks.

8 The quicker we can do that, the quicker we can go,  
9 cut back down and fix these things that need fixed. And  
10 the other thing it does, is give us confidence to regulate  
11 our public, we're coming with a very leak tight plant, a  
12 very, very leak tight plant. You know, it's not minimum  
13 standards, but extremely tight.

14 MR. DEAN: I think that would  
15 be an important way to come up.

16 MR. MYERS: You're exactly  
17 right.

18 MR. DEAN: Given the meeting  
19 we're having tomorrow, talking about the Management Human  
20 Performance Plan; can we expect to hear tomorrow more how  
21 you expect to assess the efficacy of the plant and how  
22 you're going to do that?

23 MR. MYERS: Yes, sir; and  
24 also some compensatory measurements we have in place. I  
25 could sit here and say, we're not quite, have the standards

1 at levels we would like them to be before we start up, but  
2 we'll have compensatory measures in place to ensure we're  
3 doing high quality work.

4 For instance, our Engineering Oversight Board will  
5 not go away. We'll keep that as a permanent part of the  
6 process. It's like another barrier that we ensure the  
7 quality of that documentation. So, we'll do some of that.

8 MR. DEAN: The second  
9 question I have, it gets to the issue of standards. And  
10 the fact that, you know, mentioned 1,300 contractors on  
11 site, the challenge that it is to oversee quality work of  
12 all these contractors. Do you all have anything in your  
13 contract or arrangements that either provides an incentive  
14 or disincentive to contractors relative to quality and  
15 work?

16 MR. MYERS: Depends on the  
17 contractor and the contract. Like this crane job, we pay  
18 for that in steps. And sometimes it's an incentive. We  
19 have, like our building trade, we normally use NPA's for  
20 building trades and we have engineering agreements with  
21 some of our engineering firms, but the smaller contractors,  
22 specialty contractors, typically, not, no.

23 MR. DEAN: Then the last  
24 question I have, goes back to the work that you described  
25 now I think in terms of major activities. I guess I would

1 like to get a sense for how much of this work was in your  
2 original outage work package and how much have you added  
3 either because of moving forward, capital improvements you  
4 had planned on the future or have resulted from discovery  
5 activities over the past several months?

6 MR. STEVENS: I don't know if I  
7 could give you the exact percentages, but I know we first  
8 did our Operational Readiness Reviews, we identified some  
9 work activities. We needed to go improve system  
10 performance.

11 Then, as we've gone through system reviews, we  
12 haven't really found a whole lot more. I think we found  
13 minor stuff and rolled it in, but I think the majority of  
14 this work was identified back when we did our System  
15 Readiness Reviews in May; about May time frame.

16 So, there is a few since then. And, you mentioned  
17 the Service Water Header Expansion. That's a part of the  
18 reviews that are ongoing, so that's popping up. In  
19 containment air coolers, we're going to go do that after we  
20 went in and looked at them. It was just whether or not we  
21 could get by or we should upgrade it.

22 MR. DEAN: So, getting back  
23 to the original part of that question, which was the  
24 original outage work scope package before February or March  
25 when the head degradation was discovered, how much has been

1 added to that?

2 MR. STEVENS: Just about

3 everything.

4 MR. MYERS: About all of it.

5 MR. STEVENS: We had March, March  
6 time frame, about 85 to 90 percent of the outage work scope  
7 completed, so.

8 MR. DEAN: Okay.

9 MR. MYERS: You know, the  
10 plant, you know, like our condenser. Our condenser was  
11 probably in decent state, but while we're down this long,  
12 we have an opportunity to go put a new coating on it. And  
13 that includes, that should be reliable in years time. So,  
14 we won't have to fight this in another outage, so might as  
15 well take advantage of it now.

16 Same thing with the reactor coolant pumps. While  
17 we're down, we have fuel out of this core so long, rather  
18 than just hit and miss, we normally have a packing program,  
19 we get a few valves an outage. We're going to go down and  
20 repack about a hundred valves. So, we're going to work  
21 now, as much as, so that should set us up for the long  
22 term.

23 MR. DEAN: Okay.

24 MR. STEVENS: I feel like I need  
25 to say something to some people in the audience. These



1 aren't bad people doing this work. It's one thing to say,  
2 I want it done and I want it done right, and take your time  
3 you need to get it done. That's the big explanation; and  
4 then live with that.

5 Some folks may have got caught up in previously  
6 being trained that the right thing is to meet the milestone  
7 and get everything done to get to some understanding.

8 I don't mean in answering questions that there  
9 aren't good people at Davis-Besse. They have the right  
10 standard. We have to support them, and support what their  
11 needs are to get that done right.

12 I just thought I needed to say that, because we've  
13 got some good people sitting in the audience that are part  
14 of this success at Davis-Besse, and I didn't want you to  
15 think that I'm the only one or this team is the only team  
16 here that has high standards.

17 MR. GROBE: I appreciate  
18 that, Mike.

19 And Lew, you commented on the potential of having  
20 some compensatory actions in place at the time of restart.

21 The thing that is particularly troubling in the  
22 situation is the polar crane, that's why I wanted to  
23 explore that a little bit, that your project manager placed  
24 schedule over quality. And certainly down at the level of  
25 first line supervisor, I would expect prior to restart that

1 every one of those people is operating at a level that you  
2 expect as far as quality standards.

3 You folks are demonstrating, as you have Mike, that  
4 you have the right standards, but there is only eight of  
5 you, and there is a thousand people working in that plant,  
6 so you can't be everywhere all the time. So, we're going  
7 to need to continue to understand what corrective actions  
8 and human performance area are going to be in place at the  
9 time of restart, which ones you will have confirmed in fact  
10 are effective prior to restart and what role compensatory  
11 measures will play.

12 Okay, let's go on.

13 I'm sorry, Tony.

14 MR. MENDIOLA: Just one more  
15 quick question. Was the polar crane part of a system  
16 readiness review?

17 MR. STEVENS: I don't know the  
18 answer to that.

19 MR. POWERS: No, I don't think  
20 it was ever part of a system readiness review.

21 MR. FAST: We did cover as  
22 part of readiness review, the individual crane engineer did  
23 present information to our Operation Readiness Review. We  
24 had talked about being able to implement the upgrades. So,  
25 that was done at the tail end of the Operation Readiness

1 Review, because I was the chair of that and recall the  
2 discussions that we had.

3 MR. MENDIOLA: So, it was a part  
4 of another readiness review, not its own readiness review?

5 MR. FAST: Just to take us  
6 back in time, I sat on a board looking at system readiness  
7 back in May. I had operations, maintenance, engineering  
8 representation and had system engineers come and present  
9 information. We did look at the polar crane at that time.

10 MR. MENDIOLA: Did you consider  
11 the polar crane and understand what it was going to do; I  
12 know it's the operation of the polar crane to move the  
13 head, or only as a self-contained system?

14 MR. FAST: No, as a  
15 self-contained system.

16 MR. MYERS: We also knew the  
17 head, we had cranes that we brought, we brought in;  
18 temporary cranes would be brought in and move stuff off the  
19 truck. And we look at the quality of the polar crane now.  
20 It doesn't mean -- we're upgrading the control panels, the  
21 control panels we have removed from our operations. So, we  
22 have to work on them, the plug-ins.

23 So, it was a pretty nice upgrade that we bought from  
24 this vendor. The material condition of the polar crane  
25 does not follow in the footsteps. It's still a very nice

1 looking crane. Probably better quality than what you can  
2 go rent from some vendor on these temporary cranes that you  
3 get. Doesn't meet our standards as a permanent piece of  
4 plant equipment. I don't want to leave this audience with  
5 the thought that that crane is falling apart. It's just  
6 not falling apart.

7 MR. GROBE: Okay. Other  
8 questions?

9 Jim?

10 MR. POWERS: Okay, thank you,  
11 Lew.

12 I'm Jim Powers, Engineering Director. I want to  
13 talk about an issue that has become apparent over the past  
14 several weeks and many of you probably saw it in the  
15 press. It relates to the cladding that was on the exposed  
16 head due to the boric acid corrosion on the old head. And,  
17 we had an ongoing evaluation in a laboratory down in  
18 Lynchburg, Virginia that has been underway since the time  
19 we cut this sample out of the head at the site.

20 Just to refresh you on what we did. We cut a  
21 17-inch diameter piece of that head out, using a water jet  
22 process. And, working with NRC review of what we were  
23 doing and approval of each step, cut that sample out and  
24 quarantined it and sent it down to the laboratory for  
25 further evaluation. All those evaluations tests have also

1 been approved, jointly developed by ourselves and approved  
2 by the Nuclear Regulatory Commission.

3 So, this ongoing process, the laboratory cleaned up  
4 the cladding there, and prepared it for further  
5 evaluation. One of the things that was found was some  
6 cracking on the top surface of the cladding. You can see  
7 it there where the arrow is pointing in the picture on the  
8 screen. And what we've got is several small cracks that  
9 are parallel and they appear to be on the welds leading  
10 between two pieces of clad application weld.

11 And when you look at the, initially at this  
12 magnification, you can see, based on the ruler that is in  
13 view, about a 3/8 inch long crack. Now, we have more  
14 detail reports come in since the time this photograph was  
15 sent up to us. If you look very closely along that weld  
16 seam, it looks like those cracks may extend to about two  
17 inches long. We're still in the process of evaluating  
18 those cracks and what they mean.

19 The laboratory is looking very carefully at the  
20 bottom side of the cladding to see whether they had  
21 penetrated the neck or not and is holding the pressure  
22 boundary as we had believed, but this does concern us in  
23 terms of capability of the cladding; done quite a bit of  
24 analysis of that, as you know, and we need to factor this  
25 finding into that analysis and revise what we've done

1 there.

2 And, I'll point out also, that that, this also  
3 changes the plans that we're going to be going forward on.  
4 So, we are bringing metallurgists to bear on this finding  
5 to determine what further tests we should do and how we  
6 should change the test program, so we got as much  
7 information about the cladding as possible, and get a very  
8 accurate picture on what its capability was and what those  
9 cracks mean, the pressure capability.

10 There was also in the lab was found that the  
11 cladding in general was measured there a bit thinner than  
12 what we measured when the cladding was in the reactor. And  
13 so, we are investigating that to find out what those  
14 discrepancies, what the cause of those discrepancies are.

15 We use ultrasonic testing at the site, tape  
16 measurements of clad. We also compared it to measurements  
17 at Framatone facility in Virginia; with half the Midland  
18 head, the Midland being two heads down there; and got very  
19 comparable results from those UT measurements, but the  
20 laboratory tests are a bit different. We're not sure  
21 what's that related to, perhaps some clean up of the  
22 sample, and perhaps that affected it, but we need to get to  
23 the basis on what those differences are.

24 When we did our assessment capability of the  
25 pressure retaining strength of the cladding, we had

1 analyzed two thicknesses; one was an average as found  
2 thickness, which was .297 inches; and the other was a  
3 minimum specified allowable thickness from the original  
4 design and that was 1/8 of an inch. And we didn't have any  
5 areas of 1/8 of an inch, they were .125.

6 We haven't seen anything that low in any of the  
7 measurements that we've taken either at the site or at the  
8 laboratory. So, that minimum case analysis still presents  
9 an accurate picture of the clad capability, a very thin,  
10 what's assumed to be very thin.

11 So, we know there is more work to be done in this  
12 area. This concerns us in terms of what the capability was  
13 of that clad.

14 Any questions?

15 MR. MYERS: We found out  
16 about this, and really it was a joint effort, but we bore  
17 that sample out. We sent it to the lab, and it's been an  
18 ongoing laboratory research project. As soon as we found  
19 this indication, you know, for the public, we picked up the  
20 phone and within an hour, let you all know what we found.  
21 It's been in the paper somewhat, but we wanted to share the  
22 results at this meeting.

23 MS. LIPA: Appreciate that.

24 MR. MYERS: It's going to take  
25 some work on the analysis.

1           MR. GROBE:           I know you've  
2 been working very closely with the chemical laboratory at  
3 Lynchburg, Virginia.

4           MR. MYERS:           I'll turn it over  
5 at this point to Bob Schrauder.

6           MR. SCHRAUDER:       I'm Director of  
7 Support Services at the plant. One of my major roles right  
8 now is overseeing the replacement of the reactor vessel  
9 head.

10          We have continued to make progress on that. We are  
11 somewhat behind schedule, as Mike indicated, largely due to  
12 modification and waiting for the crane to be available for  
13 us to move the old head out of the reactor; or out of  
14 containment and move the new head in.

15          Once we did get the, once we had tested the polar  
16 crane and were able to use it, those lifts went very well  
17 for us. And as we speak today, the old head has been  
18 removed from containment. It is placed in our turbine  
19 bay in temporary storage.

20          We are preparing a more, more permanent temporary  
21 storage, if you will. While we have the head on site,  
22 we're going to move it over to the pad that we poured for  
23 our dry cast storage some years ago, and we're going to  
24 construct a temporary building around the head weld and  
25 maintain that at the Davis-Besse site, waiting to take some



1 more samples out.

2 Our new head has been transported into the  
3 containment building and has been lifted and set on the  
4 reactor head safely inside the containment.

5 Just a comment. It was a major milestone for us  
6 that we managed to get that new head in place inside the  
7 containment. The crews and the people who had been  
8 standing by to make those moves were visibly excited to see  
9 the job finally go off.

10 We had prepped them for several days going into the  
11 activity. And the cranes were available to lift the head.  
12 And people were pleased to see the new head inside  
13 containment.

14 The service structure is the next step in the  
15 process for us. It is ready for installation on the  
16 reactor vessel head. We have repaired the access openings  
17 that were cut into the upper portion of the service  
18 structure to allow us access into the upper region above  
19 the installation when our approach was to attempt to repair  
20 the old reactor vessel head.

21 We had to put some temporary openings in there. We  
22 have restored those temporary openings. We have taken the  
23 surface structure down to bare metal again after that  
24 repair and we have repainted the surface structure.

25 The next step along the way will be to lift the

1 structure, lift the surface structure from its current  
2 location, place it on the reactor vessel head itself, and  
3 then there is a series of very careful and precise  
4 alignments to make sure that that surface structure sits  
5 exactly on our new head to allow proper movement of the  
6 control rods through that. So, we'll carefully align it.

7 And, then as we talked about, the massive service  
8 structure will be welded onto the lower skirt that sits on  
9 the reactor vessel head and we will be bolting it on.

10 Then, we'll begin the process of bringing back our  
11 control rod drive mechanisms and bolting them back onto the  
12 head. That in turn will raise up the space that we need to  
13 move the reactor cooling pumps off the location. That's  
14 kind of the next step where we will be going with that.

15 Containment restoration is in progress. As Mike  
16 talked about before, what we call the door or the large  
17 piece of pressure vessel itself which was cut out to allow  
18 access into containment has been lowered back into its  
19 location, and we will be welding that back into place in  
20 the next few days.

21 The other thing we have to weld is the reinforcing  
22 bar that, in the concrete shield structure itself, there is  
23 a series of bars, as in any reinforced concrete, that will  
24 be rewelded back into place, a process that uses cad  
25 welders. We began that work yesterday. We expected that